Survey of Architectural History in Cambridge
Cambridge Historical Commission

East Cambridge

Revised Edition *Susan E. Maycock*

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East Cambridge

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in Cambridge

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Revised Edition *Susan E. Maycock*

Cambridge Historical Commission
Cambridge, Massachusetts

The MIT Press Cambridge, Massachusetts London, England

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COVER: View of East Cambridge from the Warren Bridge, 1839
FRONTISPIECE: Lechmere Canal, 1920. Schooner *Northern Light* at the E. D. Sawyer & Company lumber wharf; chimney of the former New England Glass Company in background

Designed by Steven B. Smith

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by Patricia H. Rodgers and Charles M. Sullivan
Published by The MIT Press

Maintaining Your Old House in Cambridge, 1988
by Charles M. Sullivan and Eileen Woodford
Published by the Cambridge Historical Commission

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To Bainbridge Bunting, whose enthusiasm and love of buildings inspired the Commission for many years

To Robert H. Nylander, whose uncompromising standards and love of history gave all the Commission's activities an unchallengeable foundation

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Acknowledgments

Many people have contributed to this revised edition of *East Cambridge*. A few of them also worked on the original book, and their perspective has been invaluable. Most were new to this project and contributed in a variety of ways to the accuracy and completeness of this volume. For all of their support, the author and the Commission are most appreciative.

Foremost in linking the original report and this volume were Robert H. Nylander, the Commission's talented historian, and Bainbridge Bunting, its first survey director. Bob began surveying the neighborhood and doing deed research in 1964. For the present volume he undertook extensive original research in deeds, taxes, and other early records and successfully pieced together an accurate history of East Cambridge in the 17th and 18th centuries, a subject that had eluded other historians. His death before the completion of the manuscript was an enormous loss.

Bain's many contributions are noted in the Foreword and Introduction. He wrote the original East Cambridge report, and much of his ground-breaking description of vernacular residential architecture is included here. He was very supportive of this project, if incredulous at its scope, and the high standards he set in the previous volumes have guided us in this one.

The Commission's executive director, Charles Sullivan, made the most extensive and varied contributions to this book. He conceived the project more than a decade ago and secured funding for it. More recently, he took the original manuscript in hand and transformed it into a finished piece. He also wrote the sections on railroads and water transportation, took most of the copy photographs, discovered many images presented here for the first time, and oversaw the manuscript in all stages of production.

For some sections of this book, we benefited from the experience of the participants in development decisions. Urban designer Roger Booth of the Cambridge Community Development Department wrote the first draft of the Lechmere Triangle section, and Nat Green and Joe Tulimieri of the Cambridge Redevelopment Authority provided background information and reviewed the section on Kendall Square.

A number of student assistants helped with research during internships at the Commission. I would especially like to thank Therese Alduino for her papers on late-19th-century land development companies, manufacturers, railroad and omnibus lines, and the Cambridge Park Commission; Ann Gilkerson for her papers on churches, schools, furniture companies, and the county jail; Anne van Doren for her work on the St. John's Literary Institute and the settlement patterns on Charles and Spring streets; Désirée Caldwell for her preliminary research on glass manufacturing; Debra Hilbert for her paper on banks; Kim Brengle for her paper on John P. Squire's; Pat Casler for her paper on early East Cambridge probate inventories; and Sig Roos for his research on the Miller's River controversy. John Hoops organized the city directory information, collected the 1850 census data, and ran statistical analyses. A number of students worked with us for several years and became close colleagues.

Many others generously shared their research. The section on the Meigs monorail is based on a 1983 master's thesis by Tawny Ryan Nelb, who also helped us with photographs and directed us to Yale University's extensive Meigs collection. Anne Farnum of the Essex Institute prepared a paper on A. H. Davenport–Irving & Casson furniture, and Charles Sullivan's barn, which was once owned by a chairmaker, yielded a trove of company photographs and sketches. Margaret Henderson Floyd and her students at Tufts University developed a detailed report on Sacred Heart Church. Arlene Palmer Schwind exchanged information on early glassworkers. Alan Laufman of the Organ Clearing House supplied information and photographs of organs and organ builders; he and E. A. Boadley also reviewed the section on organ building. Louis Carreras, formerly of the East Cambridge Heritage Center, shared his research on late-19th-century residents and ethnic groups, and directed us to photographs in the center's collection.

One of the most intriguing documents we found was the diary of Louis Vaupel (1824–1903), an engraver at the New England Glass Company. Handwritten in archaic German, its contents were known to scholars only through a summary. Elke O'Donnell gave us a synopsis of some passages, and Hannelore Rosset carefully translated part of Volume I and Volumes II and III. Vaupel's granddaughter Mildred March shared family photographs and recollections, and Elizabeth Kahn researched the people and places mentioned in the diary.

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Photographs, both old and new, are a crucial part of this book and allow a more complete idea of the development of East Cambridge than could ever be possible through description alone. Many individuals and organizations have contributed photographs, and we would particularly like to thank the following people for their help in locating images and having them reproduced: Ellie Reichlin and Lorna Condon of the Society for the Preservation of New England Antiquities, Sally Pierce of the Boston Athenaeum, Bill Taylor of Carol Johnson & Associates, Richard Symmes of the Walker Transportation Collection of the Beverly Historical Society, Philip Bergen of the Bostonian Society, Alice Cooney Frelinghuysen of the Metropolitan Museum of Art, Thad Tercyak of the Cambridge Redevelopment Authority, Louis Tucker of the Massachusetts Historical Society, Donald York of the Cambridge Public Library, Anne Garrison at Steve Rosenthal's studio, and Kenneth Wilson at the Toledo Museum of Art. Frank Cheney allowed us to publish the only known photographs of the New England Glass Company, and Winthrop Seelye contributed two important family photographs and displayed great patience awaiting their publication. Many maps were provided by the Middlesex County Engineering Department and Joan Lastovica, City Engineer of Cambridge. For current photographs, we have been fortunate to have the services of such skilled architectural photographers as Alex Beatty, Richard Cheek, and Beverly Conley.

Members of the Cambridge Historical Commission were extraordinarily patient during the years of preparation of this volume and willingly read the manuscript at various stages. Allison Crump, William King, and Robert Neiley in particular provided useful comments. The suggestions of former Commission staff members Arthur Krim and Robert B. Rettig were also particularly helpful. Several other individuals commented on sections of the text, among them Foster Palmer and Louis Carreras.

The Commission's staff and consultants have contributed in various ways, particularly during the last months of production. Steven Smith established a fresh look for the series with his versatile page design and new cover; he also supervised all technical aspects of the book's production. John Colan laid out the book with patience and good humor in spite of delays and unforeseen changes. The manuscript editor, Luise Erdmann, brought clarity, commas, and consistency to the text. Gerry Morse proofread all the galleys on short notice. Assistant director Nancy Doonan patiently handled photographic requests and permissions, and she, her predecessor, Paul Bockelman, and preservation planner Sally Zimmerman accepted additional responsibilities to allow the project to move forward. Maria Muller of Silverprint provided excellent darkroom services, printing many of the photographs, often from difficult negatives. Cartographers Eliza McClennan and Herb Heidt of Mapworks skillfully translated our research maps into publishable form.

It remains only to thank the residents of East Cambridge, who we hope will be the primary beneficiaries of this volume. Some of them have been waiting for a long time, and their friendly encouragement has meant a great deal.

Susan E. Maycock, Survey Director
Cambridge Historical Commission
September 1988

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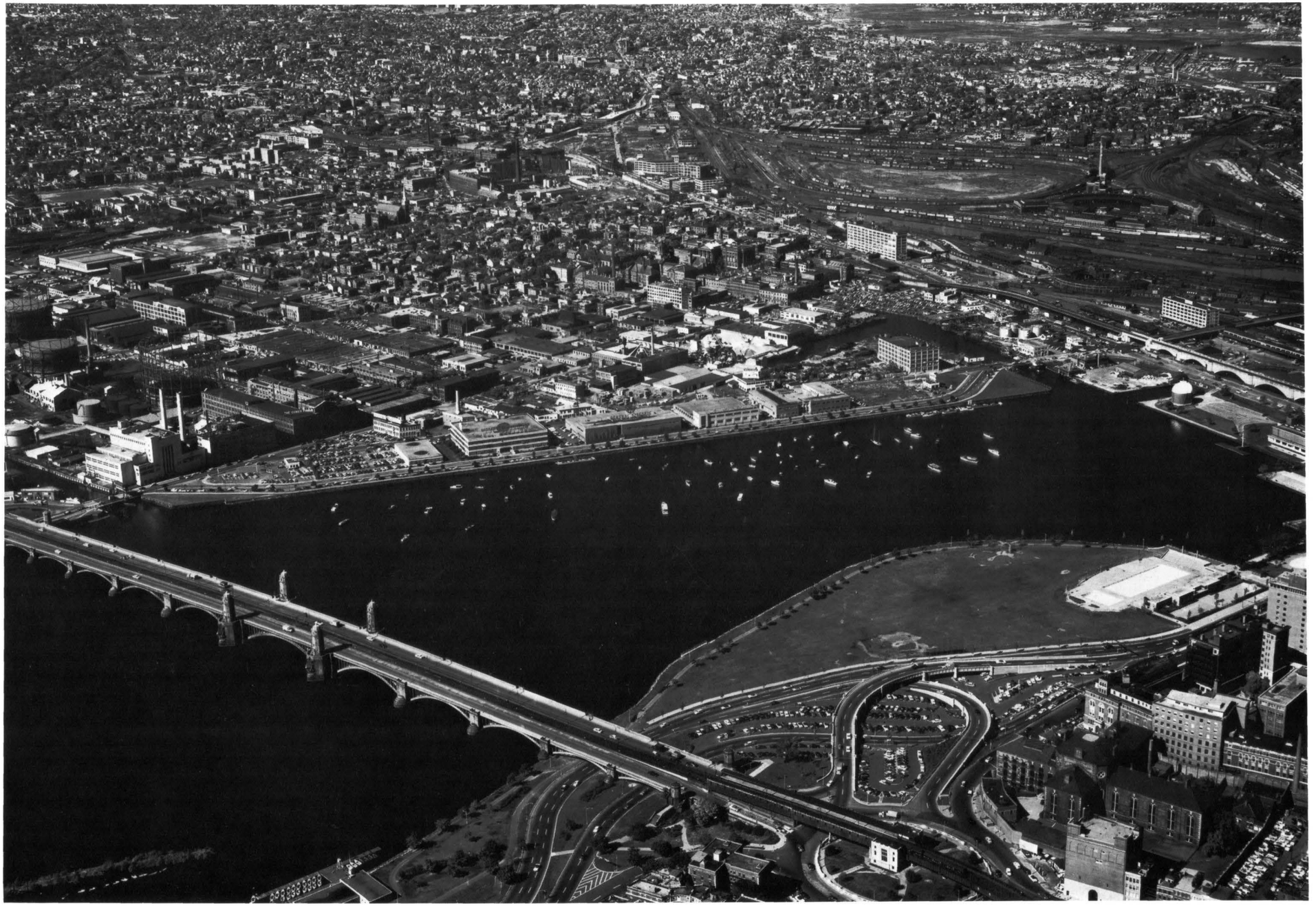

1. Aerial view of East Cambridge in 1956

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Foreword

This volume marks a return to the beginning of, and a significant addition to, the Cambridge Historical Commission's Survey of Architectural History in Cambridge. *Report One: East Cambridge,* published in 1965, was followed by *Report Two: Mid Cambridge* (1967), *Report Three: Cambridgeport* (1971), *Report Four: Old Cambridge* (1973), and *Report Five: Northwest Cambridge* (1977).

The original *East Cambridge* has long been out of print, and, given the heightened awareness of our architectural heritage and the importance of historic preservation, there have been frequent appeals to reprint it. But this apparently simple request was not simple at all. The dramatic changes of the past quarter century in East Cambridge, particularly in the industrial areas from the Lechmere Canal to Kendall Square, required revisions in the text. In addition, a format evolved in the later Survey volumes that included much greater detail and analysis than appeared in the first one, so that a simple reprinting would have been inappropriate. Each of the later volumes also benefited from the research and scholarship done for the previous ones. Thus, in order to cover East Cambridge in the same depth as the other volumes, it became necessary to undertake significant original research and to rewrite the entire report.

A glance at the contents of this revised edition shows chapters discussing not only the architecture and urban development of East Cambridge but also its social history, which was not covered in the original volume. Because it was the first of the projected series, it devoted fully a third of its hundred pages to architectural styles and developments throughout the city before getting to the specifics of East Cambridge. The present volume covers only East Cambridge, but contains approximately five times as much material, almost all of it the result of new research.

Like its predecessors in the series, this book is based on the comprehensive inventory of every structure in the city that was undertaken from 1964 to 1975 under the direction of Bainbridge Bunting, whose death in 1981 prevented his direct participation in this project. However, the real father of the survey — and the galvanizing force behind organized historic preservation in Cambridge — is Albert B. Wolfe. Speaking through the Cambridge Historic Districts Study Committee Report in 1963, he said that the city's first need in the area of preservation was "a professional survey to identify, evaluate and classify buildings of historic and architectural significance throughout the city." After the enactment of the ordinance establishing the Cambridge Historical Commission on June 24, 1963, Wolfe became its first chairman. He helped to staff the Commission, got the survey under way, and saw to the publication of the results. The Commission now maintains a file on every building in Cambridge, consisting of an architectural description, photograph, and often other research. This type of comprehensive survey, which Mr. Wolfe advocated and Dr. Bunting implemented, has become a basic preservation tool in many other communities.

From the outset, the survey was viewed as a planning tool. The 1963 ordinance instructed the Commission

to conduct a survey of Cambridge buildings for the purpose of determining those of historic significance architecturally or otherwise, and pertinent facts about them, acting in collaboration with the Planning Board and the Redevelopment Authority to the extent either may from time to time undertake such work, and to maintain and from time to time revise detailed listings of historic sites and buildings in Cambridge, and data about them, appropriately classified with respect to national, state or local significance, to period or field of interest, or otherwise.

Also from the start, the city manager and city council have included funds in the city's annual budget to staff the survey and other activities of the Commission.

The Commission's principal responsibility continues to be protecting Cambridge's two historic districts. The Old Cambridge Historic District, which includes the surroundings of the Common and Longfellow Park and both sides of Follen, Berkeley, Mason, and Brattle streets, was established in 1963 and extended in 1976 and 1986. The Fort Washington Historic District, enacted in 1982, protects the park of that name in Cambridgeport. Under the demolition review ordinance, adopted in 1979, the Commission reviews applications to demolish structures fifty or more years old throughout the city, and it can impose a six-month delay on the demolition of any structure that it finds to be architecturally or historically significant.

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Cambridge's neighborhood conservation district and landmarks ordinance, adopted in 1983, has led to the city council's action establishing two conservation districts (Mid Cambridge and Half Crown) and five landmarks. The Commission is presently undertaking an analysis of potential landmarks in areas of the city where development pressures seem most acute. Federal and local tax relief and zoning variance conditions have brought the Commission, on behalf of the city, more than a dozen facade preservation easements. The recently amended Harvard Square Overlay Zone incorporates historic preservation objectives by providing incentives for rehabilitation projects that respect contributing buildings in the Harvard Square National Register District. And for more than ten years, the Commission has provided matching grants to eligible homeowners throughout the city for the restoration or preservation of architectural features that would otherwise have been lost. Several of these grants have helped preserve East Cambridge houses discussed on the following pages.

Finally, the inventory has been used in other publications by the Commission's staff, including Robert Bell Rettig's *Guide to Cambridge Architecture: Ten Walking Tours* (1967), Patricia H. Rodgers' and Charles M. Sullivan's *Photographic History of Cambridge* (1984), and Charles M. Sullivan's and Eileen Woodford's *Maintaining Your Old House in Cambridge* (1988). Future publications will also use this material, which continues to be augmented by ongoing research. As with this *East Cambridge*, our goal is not just to educate and inform but to make all who live, work, or pass through Cambridge more appreciative of their surroundings, their heritage, and the people whose legacy they share and adapt in our own time.

William B. King, Chair
Cambridge Historical Commission
August 1988

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Introduction

The preparation of this book involved a very substantial commitment from its author, Susan Maycock, the help of dozens of graduate students, research assistants, and office staff, sizable annual appropriations by the city manager and city council, and a great deal of faith by our editor, Roger Conover. But it did not take place in a vacuum: the Commission's five-volume Survey of Architectural History in Cambridge, published between 1965 and 1977, and its inventory of Cambridge's 13,000 buildings provided both a resource and a precedent.

The Survey of Architectural History in Cambridge was initiated in 1964 by Albert B. Wolfe and Dr. Bainbridge Bunting. Bunting had pioneered the study of American Queen Anne architecture in his 1940 dissertation, which was published as *Houses of Boston's Back Bay* in 1967. When he was hired to undertake the Cambridge inventory, the study of vernacular architecture—that is, buildings designed by carpenters who had no formal training—had hardly been defined. Bunting saw in the Cambridge inventory the opportunity to study new aspects of 19th-century American architecture, and he fully concurred with Wolfe's decision to start with East Cambridge, perhaps the most obscure and least understood of all the city's neighborhoods. Both men realized that if the survey began with the high-style houses of Old Cambridge, it might go no further.

As the series evolved under Bunting's direction, each volume sharpened the focus of its predecessors. The first *East Cambridge* established a methodology, initiated the study of vernacular architecture by documenting the evolution of Georgian house plans through the 19th century, and evaluated building styles and types as yet unexamined by most architectural historians.

Cambridgeport, the second to be written but the third to be published, advanced the study of residential vernacular architecture and evaluated the city's industrial buildings. The historical geography of Cambridge was first studied in this volume, making a contribution to urban history as well as architecture.

Mid Cambridge expanded on the survey team's understanding of the city's evolution and was the first to use original research on the city's 18th-century estates. The study of Cambridge's social history through city directories was initiated in this volume.

Report Four: Old Cambridge was the first to fully integrate Bunting's architectural knowledge with the extraordinary historical insight of Robert Nylander, who had begun the study of Cambridge history with the Commission in 1964. Understanding Old Cambridge meant going back to the records of the original settlement of Newtowne in 1630, and this enabled the Commission to present a history of Cambridge based on factual research, stripped of the imaginings of many earlier writers.

It was recognized that North Cambridge required a different approach entirely, and in 1971 Bunting hired an urban geographer, Arthur Krim, to carry out the study of this "urban fringe." When *Northwest Cambridge* was published in 1977, it too broke new ground by synthesizing vernacular architecture and urban geography. As far as the public was concerned, it also completed the series.

By this time, thirteen years after the beginning of the Survey, the staff recognized that *East Cambridge* lacked the depth of research underlying the later volumes, and so it was correspondingly less useful as a planning and preservation tool. Bunting was understandably reluctant to begin the series all over again but agreed to review the work as it neared completion.

The project began in 1979 with the timely return of Susan E. Maycock, an architectural historian who had worked for the Commission from 1968 to 1970 and periodically thereafter. The concept that evolved required a thorough investigation of the 17th-century history of Haugh's and Graves' Neck; unraveling the intrigues of Andrew Craigie, speculator extraordinaire, most of whose papers were burned by his widow; solving the mystery of Bulfinch's design of the Middlesex County Courthouse, which scholars presumed had been demolished in 1848; learning the history of the glass industry, which despite its importance had left very few traces; and, finally, exploring the social history of this early planned village and charting the connections between the successive waves of immigration and the development of its distinctive vernacular architecture.

Robert Nylander, who soon contracted the illness that led to his death in 1987, undertook the meticulous research necessary to reconstruct the evolution of the landholdings on Lechmere's Point from the time of Thomas Graves, Cambridge's first settler, to the end

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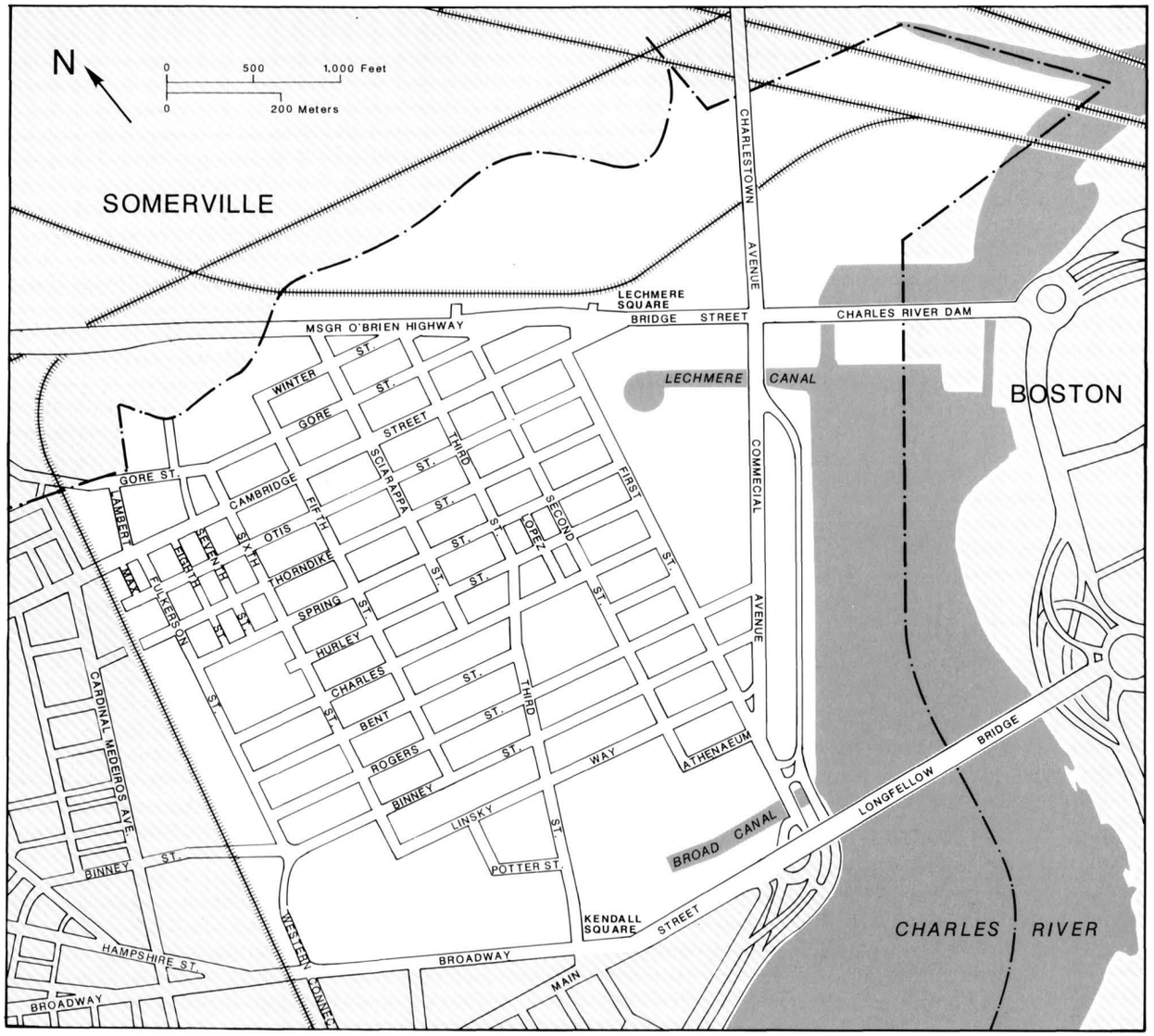

2. East Cambridge survey area

of the 18th century. His work cannot be underestimated and probably could not have been completed by anyone else. No accurate map of East Cambridge was drawn until 1811, and the reconstructions of early property lines shown in Figures 8–11, 16, and 20 are entirely derived from the descriptions in early deeds. How Nylander made sense of the hundreds of transactions involving the early marsh lots—10 or 20 feet wide and hundreds of feet long, with no fixed boundaries—is beyond imagining.

The project also involved the labors of many student researchers, some of whom were supported by the federal work-study program and a few of whom worked for course credit. Every semester for several years students would be sent off to investigate arcane topics in East Cambridge history. The papers they produced, some of which are very detailed, are an important resource for future historians.

Another aspect of the research was the winnowing of collections throughout the Northeast for material relating to East Cambridge. Eventually, libraries and collections in Boston, Lowell, Worcester, New Haven, New York, and Washington, D.C., yielded significant material, as did glass specialists in Toledo, Ohio, and Corning, New York, organ enthusiasts in New Hampshire, and railroad and transit historians throughout eastern Massachusetts. No more than 10 percent of the historic photographs and maps shown in this book were known in 1965.

The study of city directories and state and federal censuses was an endless preoccupation of the staff. For years, no one took a trip without a photocopied directory and a stack of coding sheets. While this experience afforded the hapless coders a firsthand look at the occupational diversity of mid-19th-century East Cambridge (particular favorites were the whistling soloist, the eclectic physician, and the Indian doctor), correlations with the architectural development of the area could not be explored as fully as we had hoped. Much of this information remains to be mined more deeply in the future.

Some of the work represented here has already had a practical application. Maycock's research on the Bulfinch courthouse and Nylander's understanding of early-

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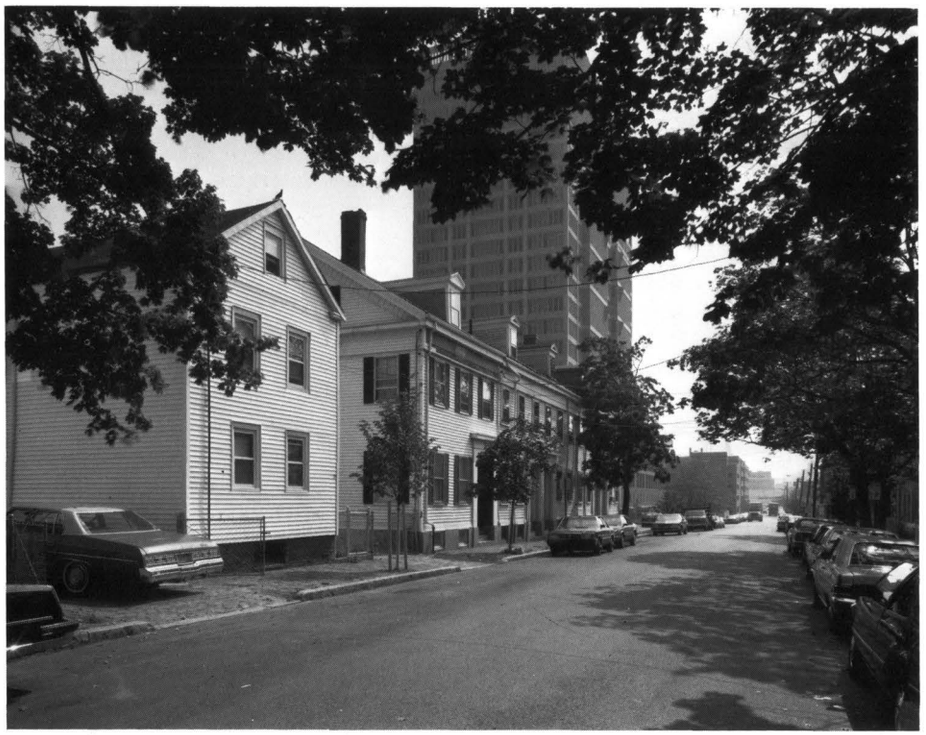

3. Spring Street looking east from Sciarappa Street, 1988

4. Commercial Avenue, 1988

19th-century construction practices enabled the courthouse to be restored more precisely than would have been possible otherwise. In particular, Maycock's and Nylander's reconstruction of Ammi B. Young's east portico from the siimmest documentary and physical evidence was followed precisely by the architects, with stunning results. Another application was the presentation made to the 1984 conference of the Society for Industrial Archeology on the history of the New England Glass Company and the correlation between the architecture of workers' housing and the experiences of glassworkers.

In the end, the object of the whole exercise has been to promote the conservation of this neighborhood as a vital community. The Commission sees the Survey as a planning tool, and feels that development and planning decisions will be more successful if they are based on a deeper understanding of the history of the city. East Cambridge, in particular, can benefit from such an understanding. Founded as a planned community, it was guided in its early years by a private development corporation. Throughout the 19th century, empty land was filled, streets were laid out, and lots sold on a large scale by a succession of land companies acting as planners and developers. No other Cambridge neighborhood had this experience, and in this context the present activity of the Community Development Department in the Lechmere Triangle area seems only a continuation of past trends.

Luckily, the planning to date has respected East Cambridge's industrial landmarks and public buildings. But the radical shift from the old residential neighborhood on the upland to the corporate offices, three-anchor mall, and million-dollar condominiums in the triangle makes one fear that development has been allowed to go too far. As the North Point area is developed, the planners would be well advised to look back at the time that this section was a neighborhood with its own street grid and avoid the error of treating it out of context, thereby repeating a mistake made too often in the past.

Charles M. Sullivan, Executive Director
Cambridge Historical Commission

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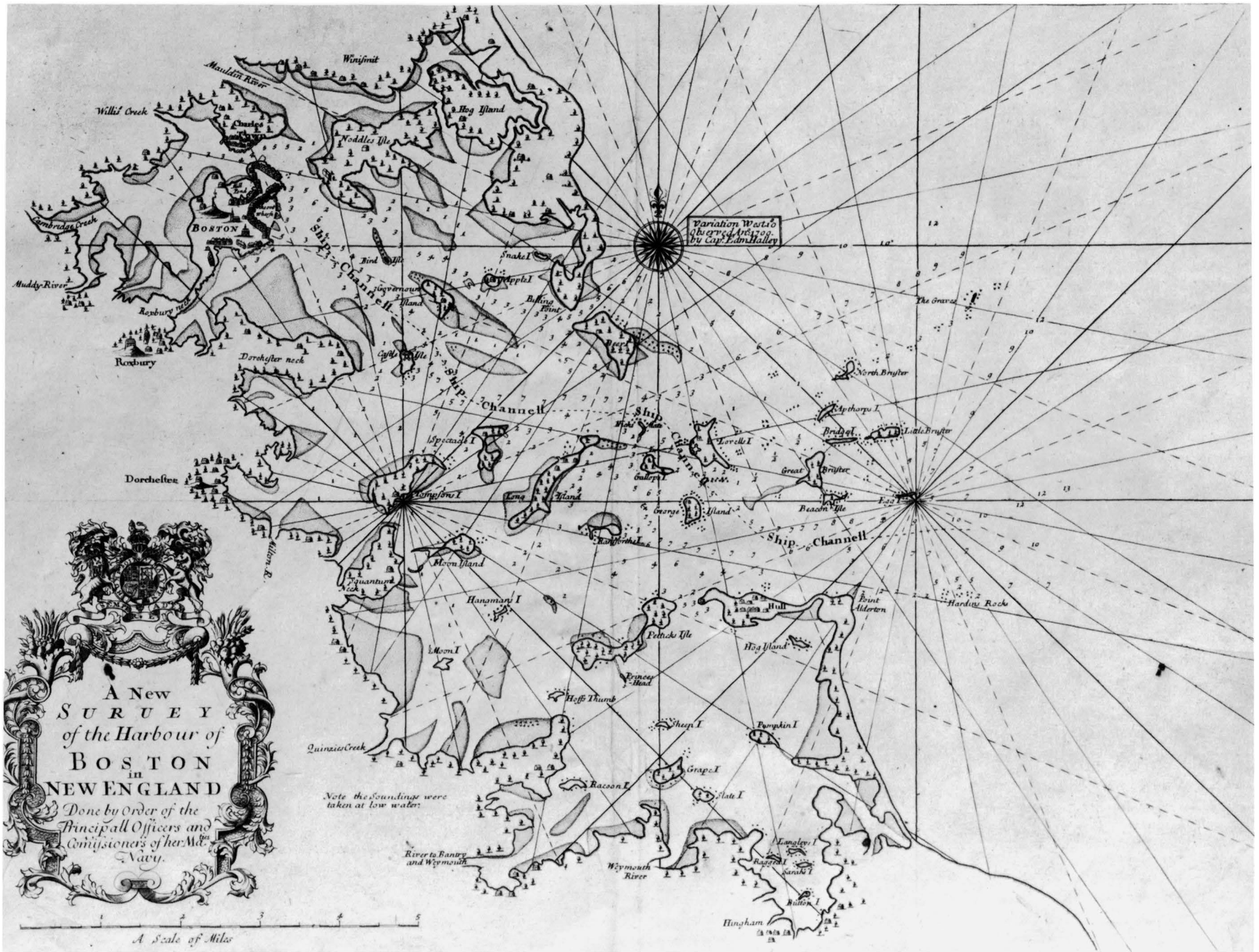

5. Boston Harbor, 1707, showing Willis Creek (now the Miller's River) and the Graves-Haugh House on Haugh's Neck, now East Cambridge

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I

Early Settlement and Development

East Cambridge, unlike the other villages that gradually coalesced to become modern Cambridge, was essentially the creation of a single individual, Andrew Craigie. Although the first inhabitant settled here in the 1630s, little use was made of this watery land until the early 19th century. Then Craigie, an accomplished land speculator, obtained a charter for a bridge to Boston and enlisted some of the most powerful men in the commonwealth to carry out his plans. In 1814, in an astonishing political maneuver, Craigie and his associates even persuaded the Middlesex County commissioners to move the county seat from Harvard Square, in Old Cambridge, to the remote marshes opposite Boston.

East Cambridge eventually thrived, although Craigie died bankrupt. Its proximity to Boston rivaled that of Cambridgeport, Charlestown, and South Boston, and its superior access to water, highway, and rail transportation attracted some of the largest industrial enterprises of the time. The filling of the surrounding marshes and tide flats proceeded for almost a century and a half until 1950, when the last lots on Commercial Avenue were developed. Built over once, East Cambridge is now undergoing redevelopment at Kendall Square, along the Lechmere Canal, and at North Point.

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Topography, Early Ownership, and Land Use

Thus much I can affirm in general, that I never came in a more goodly country in my life, all things considered: If it hath not at any time been manured and husbanded, yet it is very beautifull in open lands, mixed with goodly woods, and again open plaines, in some places five hundred acres, some places more, some lesse, not much troublesome for to cleere for the plough to goe in, no place barren, but on the tops of the hils; the grasse and weeds grow up to a man's face, in the lowlands and by fresh rivers aboundance of grasse and large meddowes without any tree or shrubbe to hinder the sith [scythe].

Thomas Graves, 1629, in Frothingham, *History of Charlestown*, p. 27

East Cambridge in the 17th and 18th centuries was a landscape of upland and salt marsh surrounded by vast mud flats at low tide, almost totally isolated from the rest of the town. The dividing lines changed over the decades as the tides swept in and out, eroding some areas and building up others. The flats were rich in oysters, and the drifts of shells found in recent excavations are evidence that the Boston Basin was good foraging ground for Indians. Both types of terrain were valuable to the colonists for agriculture – the upland for grazing, the marsh for salt hay – but the area as a whole was difficult to reach. The salt hay was immediately usable, but extensive cutting altered the landscape by promoting erosion of the marsh in some areas. The changing character of the watery landscape and the struggle to keep the two zones separate are apparent in early deeds.

To the earliest settlers, the Boston Basin was a vast, low-lying watery plain punctuated by numerous drumlins, left by the last glaciers only 10,000 years earlier. At high tide, the landscape seemed more water than land, as the meandering channels of the Mystic and the Charles rivers and creeks too numerous to count divided the upland into fingers of land fringed by marshes. The drumlins were the dominant feature: steep, rounded hills of glacial gravel and clay that generally ran in a northwest-southeast direction, with the steepest slopes to the southeast. Those closest to the harbor were islands at spring tides, and were linked to the mainland only by narrow necks of marsh. In the Boston Basin, Noodles Island (East Boston), Charlestown, East Cambridge, and Dorchester Neck (South Boston) shared this characteristic with the Shawmut Peninsula, now Boston proper (Fig. 5).

The exposed situations of Charlestown and the Shawmut Peninsula were seen as a drawback by the first colonists, who arrived in the summer of 1630 to establish the Massachusetts Bay Colony. Fearing invasion by pirates and military action by the British Crown, to revoke the charter granted in 1629, the governor and his assistants established a fortified capital, called Newtowne, a few miles up the Charles River at what is now Harvard Square. Others had already settled at Charlestown, and villages at Medford and Dorchester soon followed. Charlestown and Cambridge, separated by Gibbons' Creek, divided the upland between the Mystic and the Charles; the drumlin that is now East Cambridge was the most prominent feature between them but was actually much closer to Charlestown.

The East Cambridge upland was known in the 17th century as Graves' Neck, for the owner and first settler, engineer Thomas Graves (Fig. 6). One of a swarm of drumlins between the Mystic and the Charles, it formed the northernmost of a series of hills on Cambridge Neck that rose out of the marshes on the north side of the Charles River. Moving south from Graves' Neck, the other drumlins included Pelham's Island, near the present Lafayette Square; Captain's Island, at the foot of Magazine Street; and Sand Hill, near the west side of Putnam Avenue. Graves' Neck was the largest of these upland masses and the only part of modern East Cambridge that was initially high enough to be used for building. It stretched from what is now Sixth Street to Second Street and Charles Street to the Miller's River and included a small salt marsh island south of Charles Street that was known as Rabbit Island in the 18th century.

Separating the East Cambridge upland from Boston and Charlestown in the 17th century were that part of the Charles River called Oyster Bank Bay to the east and the Miller's River (also called Gibbons' Creek or Willis Creek) to the north. The extensive salt marsh to the west and south (known as "the Great Marsh") formed a natural barrier between the upland and Old Cambridge. While its river frontage and proximity to Boston were exploited early, its isolation from the rest of Cambridge was a major factor in slowing the development of East Cambridge and continued to affect the area well into the 19th century.

By the late 19th century all the marshes had been filled in and East Cambridge had become continuous solid land with Cambridgeport and Old Cambridge, but the extent of the former watery landscape is still evident in the street pattern. South of Charles Street and west of Sixth Street, the street grid is more open than in the original upland area. Blocks vary in size, the landscape is flatter, and there is more open space. This irregular area marks the extent of the original Great Marsh.

The northern edge of East Cambridge was also transformed in the 19th century. Beginning in the 1830s, the Miller's River was gradually filled, eliminating by the 1920s the water transportation that had been so important in attracting industry to this area. The last remnants of the original marshy landscape and tide flats that characterized the area for so long were obliterated in the 1890s, when the eastern edge of East Cambridge was filled to create a seawall on the Charles River Basin. The present shore follows the harbor commissioner's line, established by 1847, and gives no

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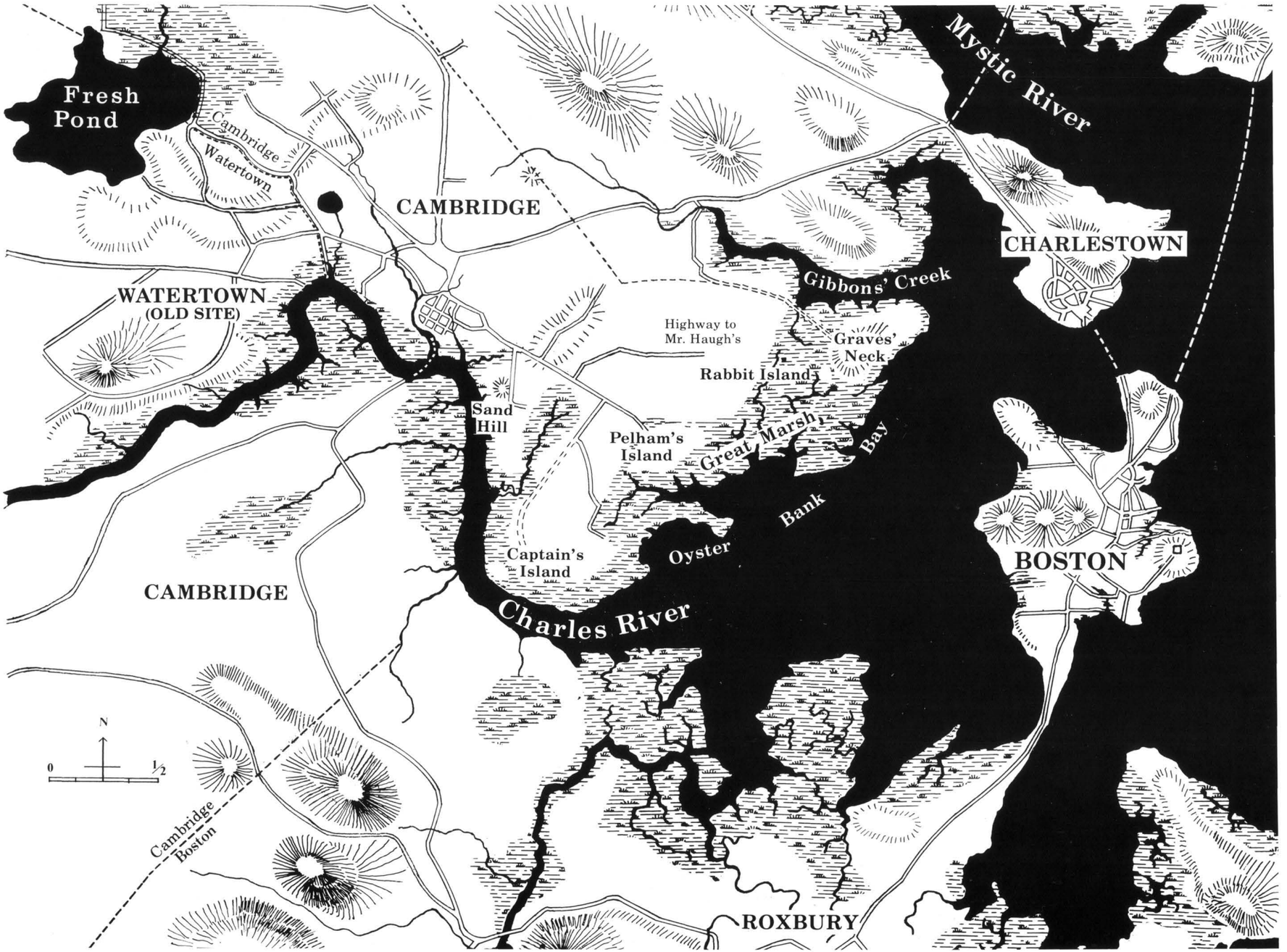

6. Cambridge and environs, 1640

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indication of the ragged 17th-century coastline that extended as far inland as today's Second and Third streets.

Land Ownership, 1632–99

In 1628/29, the Massachusetts Bay Company in London hired Thomas Graves to examine the suitability of various lands in New England for setting out and fortifying a town. In 1629, he laid out the town of Charlestown in 2-acre lots to prepare for its settlement, and directed the building of a "great house" that became the meeting house. Graves, a surveyor and engineer experienced in finding and developing iron, lead, copper, and salt mines, building fortifications, surveying buildings and lands, and making maps, was recommended to the company as much "for his honesty as skill in many things very useful" (*Mass. Bay Records*, vol. 1, p. 390). The company initially paid him £5 per month plus return passage to America, with the understanding that if after six or eight months' service the company decided to extend his contract to three years, it would pay the transportation to New England for Graves' wife, five children, a boy, and a maid servant. Graves wrote that in his contract the company also promised "to build me a convenient house for myself and my said family, at their charges, and thereto to assign me 100 acres of land, and to have part thereof planted at the Company's charge against the coming of my family" (*Mass. Bay Records*, vol. 1, pp. 32–33) (Fig. 7).

7. Facsimile of Thomas Graves' signature as it appeared on his contract, 1629

After his contract was extended, Graves received for his services 100 acres of upland in what is now East Cambridge, and this became known as Graves' Neck. The exact date of his grant is unknown, as no record of the transfer has been found, but it was before March 6, 1632/33. On that date, the General Court established the boundary between Cambridge and Charlestown (large areas of which are now Somerville) by declaring that "all the land impaled by Newe Towne men, with the neck thereunto adjoining, whereon Mr. Graves dwelleth, shall belong to the said Newe Towne" (*Mass. Bay Records*, vol. 1, p. 94). Newtowne (Cambridge) was impaled, or fenced, by a palisade of upright logs extending from the Miller's River near the Grand Junction Branch railroad to the Charles River near Ash Street.

Graves received his land by means of a "peculiar grant," the 17th-century practice of granting land to a person in return for some special services performed rather than by a regular town grant. Peculiar grants were usually not considered part of any one town and were often not recorded. While it has been thought that Graves' Neck was originally part of Charlestown and was later ceded to Cambridge, it seems more likely that the Neck was not considered part of either town until the court decision in 1632/33 that declared Graves' Neck and everything west and south of it part of Newtowne. Before that time, the boundary between the two towns was indefinite.

The boundary description mentions Graves' house, which is thought to have been on the north side of what is now Spring Street between Third and Fourth streets (see Fig. 5). The first house in East Cambridge, it was for many years the only one. This may be the house that appears on the extreme left in an 1810 view of Lechmere's Point (see Fig. 29). Graves could not have lived in the house for long, because he sold his land on Graves' Neck by 1634. Whether he remained in America or returned to England is unknown.

Apart from Graves' grant, the land outside the village east of Quincy Street and north of Massachusetts Avenue was allocated to settlers by the Proprietors of Newtowne beginning in 1632. Settlers were initially required to live in the village, and lots were used for agriculture or pasturage, not for dwellings. As late as 1793, there were only four houses in all of Cambridge east of Dana Street.

This territory was divided into four named parcels. First came the Old Field, 63 acres east of Quincy Street and west of Dana Street (then called "the way to the common pales"). East of Dana Street to between Hancock and Lee streets was a 46-acre allotment known as "small lot hill," which was parceled out in individual grants. The next allocation to the east was the Neck, on the north side of Massachusetts Avenue, which included all the upland from Hancock and Lee streets to the marshland beginning at Portland Street. The last was the Great Marsh and the Oyster Bank, which included all the marshland bordering the Charles River from Captain's Island (at the foot of Magazine Street) east and north to Graves' Neck. The Great Marsh north of Main Street was divided into long, narrow lots running east to the river (Fig. 8).

By 1635, all this land had been divided and allocated, with some of the settlers holding lots in each area. Graves' Neck stood out as a large single holding of upland surrounded by smaller marsh grants. After 1650, the marsh lots began to change hands, boundaries were rearranged, and smaller lots were consolidated into single landholdings. By the late 17th century, more than 50 percent of the owners of marsh lots did not live in Cambridge but in towns farther west, an indication of the value of salt hay to inland farmers.

In either 1633 or 1634, the ownership of Graves' Neck passed to Atherton Haugh, who is listed in the *Proprietors' Records* on October 10, 1635, as owning "In Graves his Necke Aboute one hundred and Thirty Ackers wth one Dwelinge houfe and outhoufes." The additional 30 acres was granted to Haugh by the Proprietors of Newtowne in 1634. By 1642, Haugh had also acquired three neck lots containing 81 acres and three Great Marsh lots containing 83 acres to make his total holdings 294 acres (Fig. 9). The land still contained only one house with outbuildings. It is not known how long Haugh lived on Haugh's Neck, for he also owned a house in Boston, at the corner of School and Washington streets. When he died, in 1650, his wife complained that the Boston house was "very much

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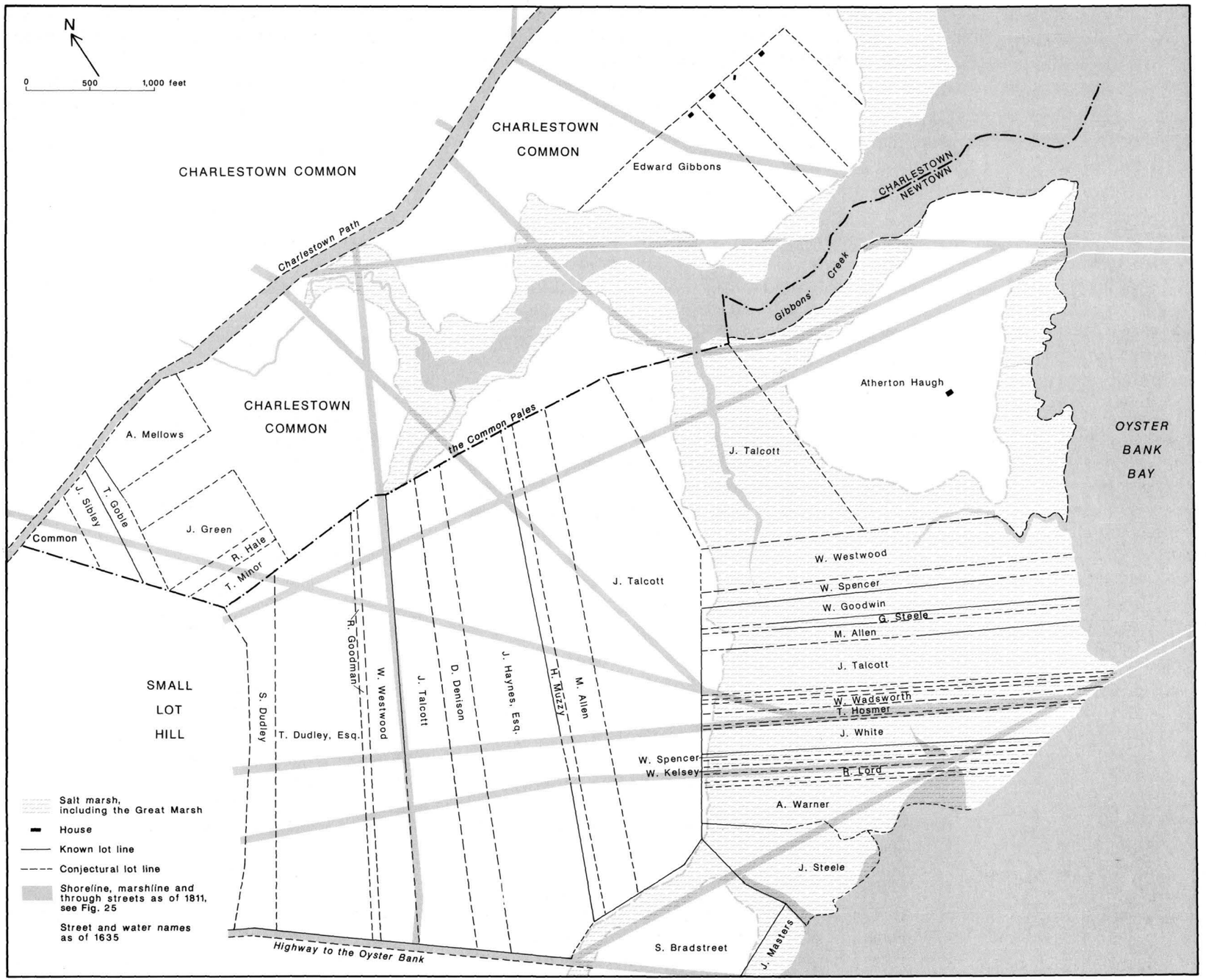

8. East Cambridge land ownership, 1635, from original deeds

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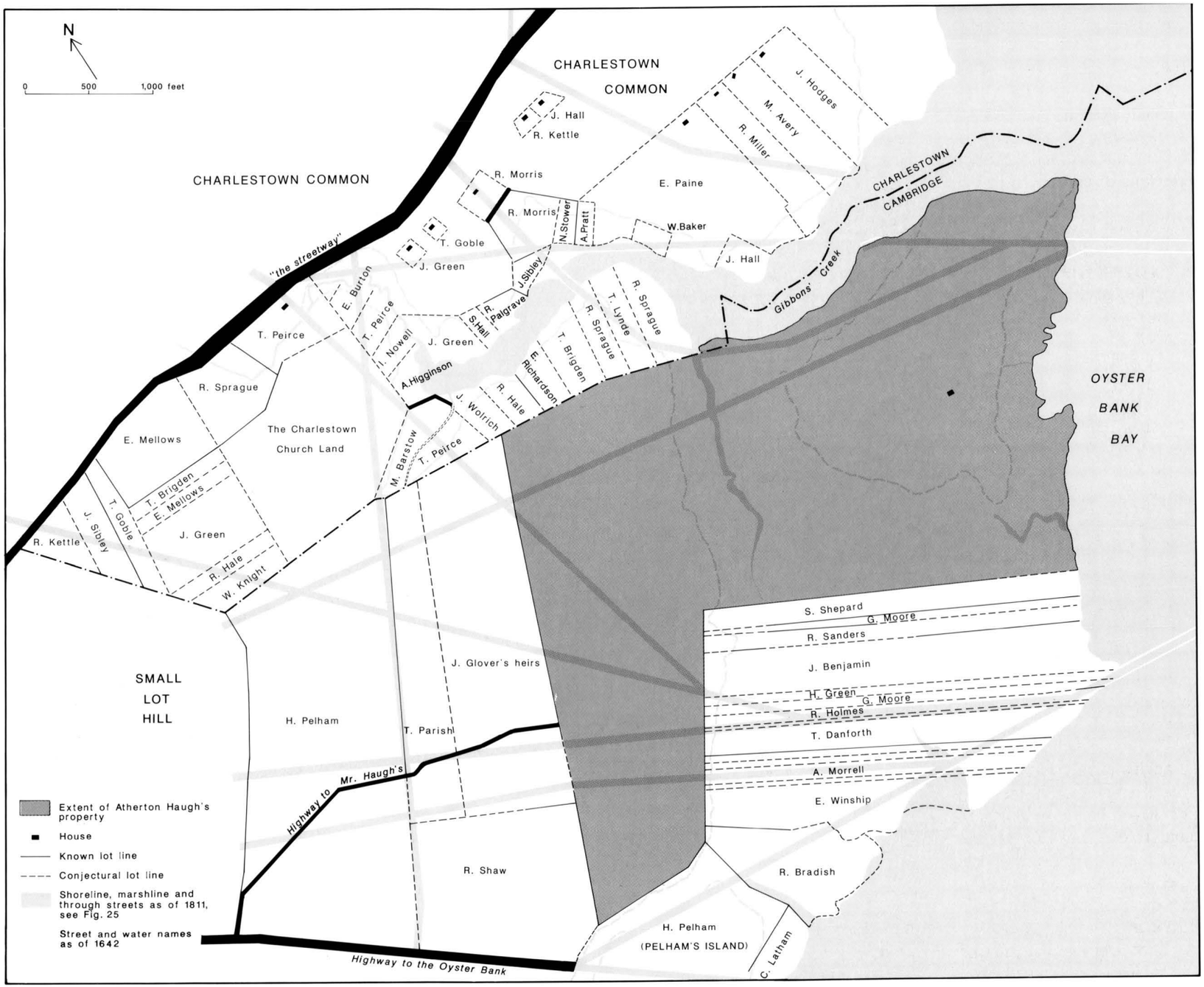

9. East Cambridge land ownership, 1642, from original deeds

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out of repair," so he may have been living in Cambridge at that time.

Haugh's inventory of 1662 lists the contents of his house by room: the chamber over the hall, the garret, the parlors, the hall, the cellar, the kitchen, and the little chamber as well as the farm. This description suggests a large house with an unusual floor plan and may describe his Cambridge house; there is no way to be sure.

After his death, the land passed to his son Samuel and later to his descendants. It remained in the Haugh family until 1700, but none of the descendants lived in Cambridge, and the farm on the neck was rented to tenants. Haugh's 1662 inventory also lists twenty-one sheep on the farm, the only clue to how the land was used in the 17th century. Descriptive words like *woodland*, *pasture*, and *orchard* do not show up in East Cambridge deeds until the early 18th century, so that any earlier use of the land, beyond the general categories of farming and harvesting salt hay, remains a mystery.

Throughout the 17th century, land access to Haugh's farm remained difficult. The neck continued to be virtually isolated from the rest of Cambridge, although it was only a short row across the river from Boston or Charlestown. The only overland route was from the Charlestown-Watertown path, now Kirkland and Washington streets. In 1654, a town committee was appointed to resolve differences about ways that began in the vicinity of Hancock and Lee streets leading "to the severall lotts of marsh towards mr. Haugh's farme," but it is not known whether any of these actually penetrated the Great Marsh.

The easiest access to Haugh's farm was by water. The landing place that was documented in the 18th century, along the Miller's River between what are now Portland and Fulkerson streets, probably was established in Graves' time (see Fig. 11). Here, the banks were solid and the channel was close to shore, as opposed to the shallow flats on the Charles River side of the property. Eighteenth-century accounts of river crossings from Boston to Lechmere's Point indicate that this was probably the primary access route before the bridges.

From the beginning, attempts were made to control the watery landscape. Dams and ditches are mentioned in 17th-century deeds. Whether they were designed to contain the tides and drain the lots or to establish property lines is unclear; probably both were necessary in such unstable terrain. The most prominent manmade feature was the "Great Dam," also known as "hoff's [Haugh's] Dam," which extended about 800 yards southeast from a point in the marsh (near present Plymouth and Portland streets) to the creek at the southeast corner of Haugh's property, near Third and Munroe streets (see Fig. 11). Between 1635 and 1642, Haugh bought the marsh lots between his farm and the dam, so that it was probably built during this period. The dam created a permanent boundary marker in an area subject to tidal erosion while also keeping the full force of the tide out of Haugh's land. Other marsh lots were described in the 17th century as "walled in from the tide," so it seems to have been a common concern. Nothing is known about the appearance of the dam itself. While the tide range at Charlestown is about nine feet, the marshes would have been flooded at spring tides to a depth of perhaps two or three feet. Any dam built to contain the tide need only have been about three feet high and would have been created from soil excavated from an adjoining ditch. Some flooding was necessary to maintain the salt grass that was so desirable. Eighteenth-century descriptions also mention cross dams extending north from the east end of the Great Dam and at several intervals to the west. Remnants of the Great Dam were still visible as late as 1877, when Lucius Paige wrote his *History of Cambridge*; the angular feature seen on 18th-century maps projecting south into the marsh may be a series of such dams.

Land Use and Consolidation of Ownership, 1699–1799

After four generations of Haugh ownership, Atherton Haugh's great-grandsons sold the family's 300 acres on Haugh's Neck to Boston victualler John Langdon in 1699 (Fig. 10). Nothing is known of Langdon's use of the land or whether he ever occupied it. After only seven years, he sold it to Spencer Phips, later lieutenant governor of Massachusetts. Between 1708 and 1710, Phips added six parcels containing 13½ acres north of his original purchase, which gave him nearly all the Miller's River frontage west to the present Webster Avenue. When Phips died, in 1757, his East Cambridge estate contained 326 acres and stretched from Prospect and Columbia streets to the Charles River and from School Street to the Miller's River.

Phips' probate inventory describes the property as two farms, each with a house and a barn, and an orchard. This division may have been made by the Haugh brothers who inherited the property in 1679. Sam Haugh had carpentry done at his farm in 1691; although the nature of this work is unknown, it must have been fairly impressive, as Judge Samuel Sewall made a special visit from Boston and mentioned it in his diary. One of the houses, described in the inventory as "the large Dwelling house," was the Graves farmhouse or a later house on the same site. The other later became known as the Bordman house, on Plymouth Street between Webster and Berkshire streets. Nothing is known of the appearance of either, although an early-19th-century resident described the Bordman house as an ancient homestead with tall chimneys and a broad, old-fashioned hall set amid orchards bearing all kinds of fruit; it burned in the 1840s.

These two farms were presumably rented during Phips' ownership, as Phips himself lived in a house on Arrow Street, near Harvard Square, which he bought in 1714. However, he is reported to have built a splendid mansion in about 1750 on what is now Otis Street near Third Street. This may have been intended as his principal residence or as a country retreat for entertaining, but it was short lived. A 19th-century account says that during a party to celebrate its completion, "by some carelessness the house took fire, and everything with the exception of the farm and carriage houses was destroyed" (Simpson, p. 13).

Spencer Phips died in 1757; two years later, his land was divided among his children and grandchildren: Colonel David Phips, Sarah Bordman, Mary Lechmere, Rebecca Lee, and the children of Elizabeth Vassall

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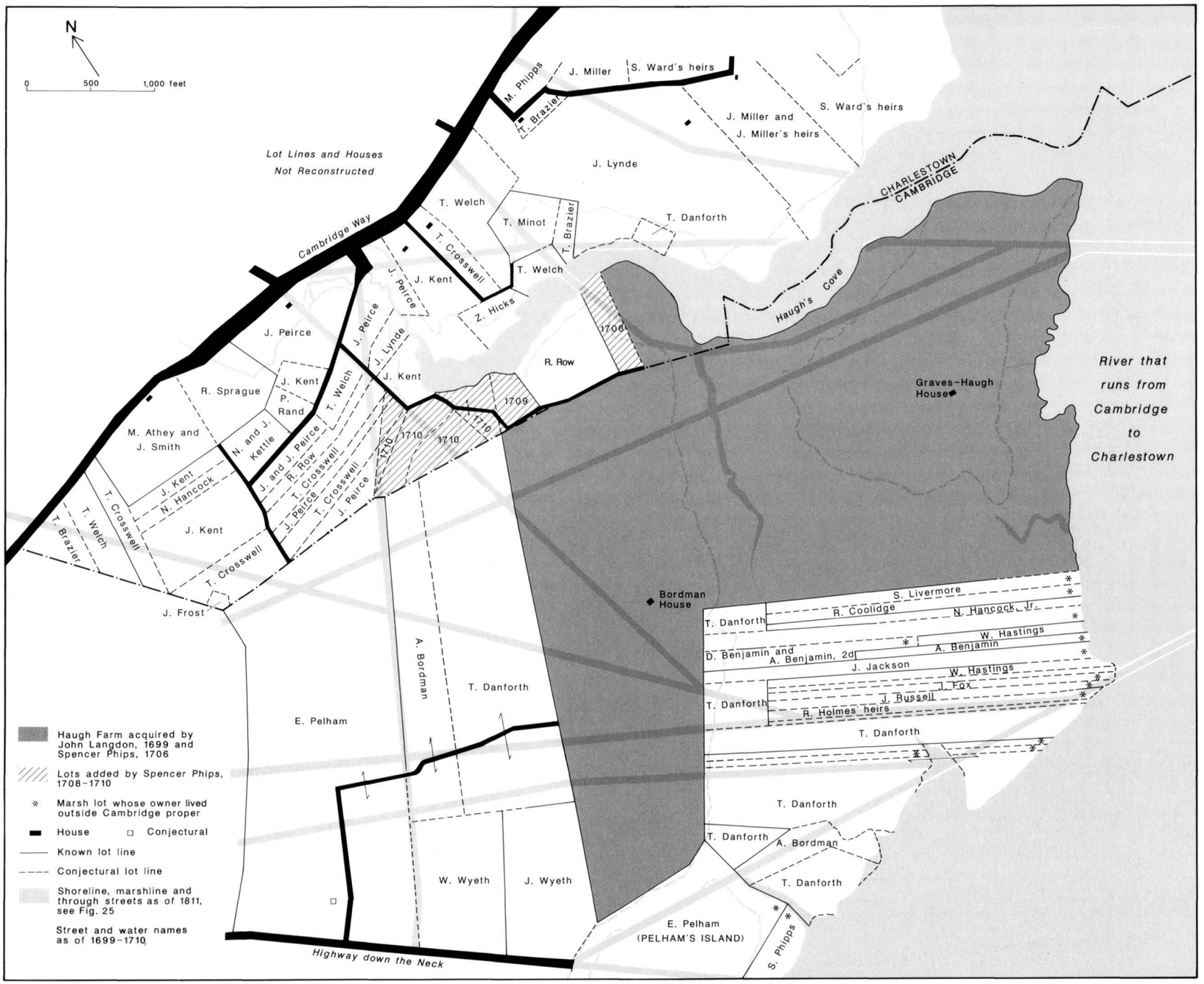

10. East Cambridge land ownership, 1699–1710, from original deeds

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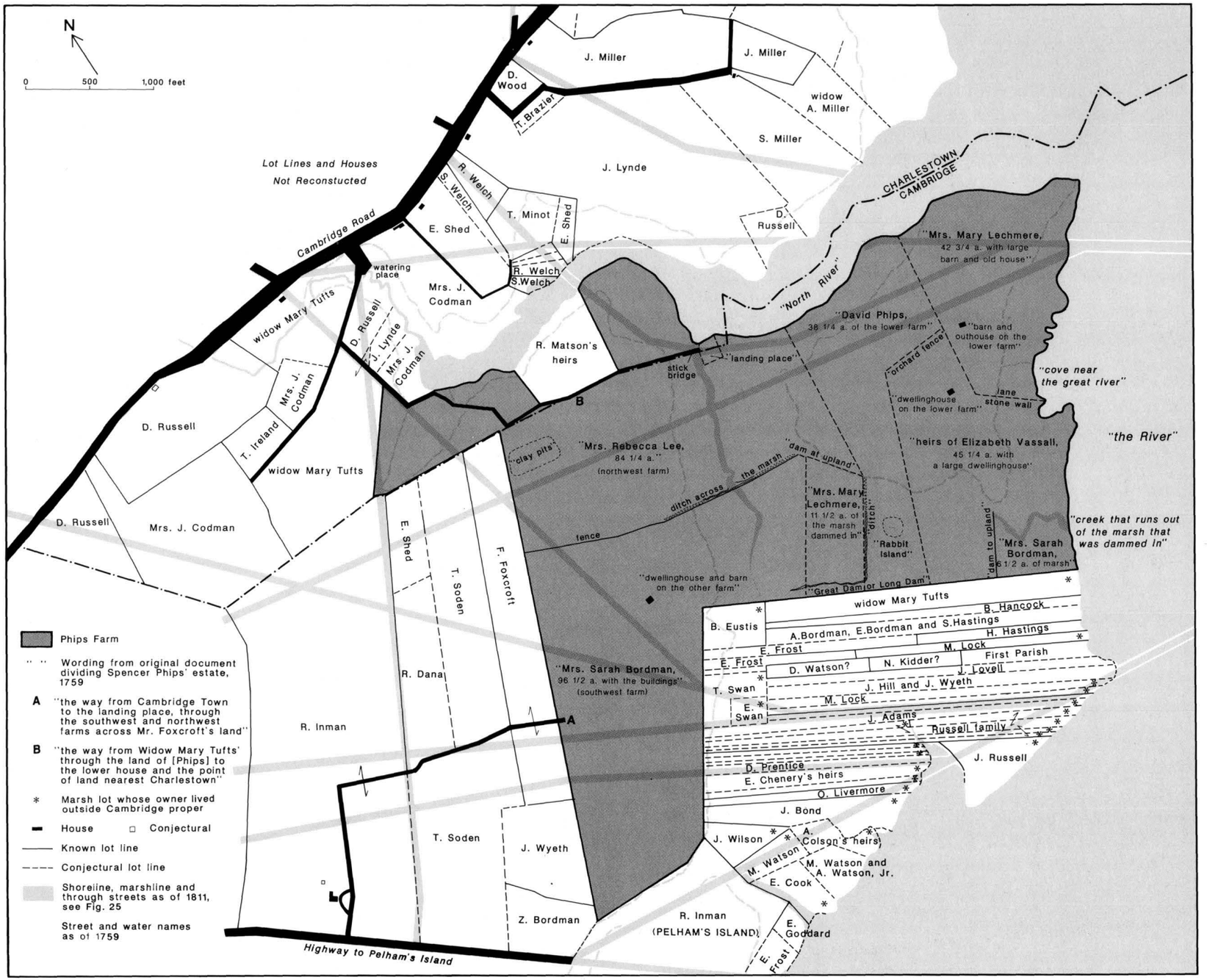

11. Partition of the Spencer Phips farm, 1759, from original deeds and probate records

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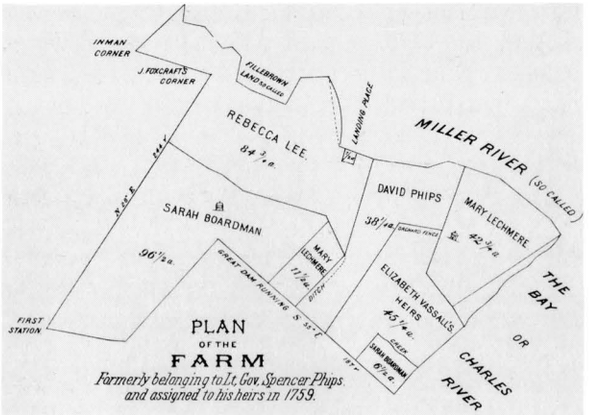
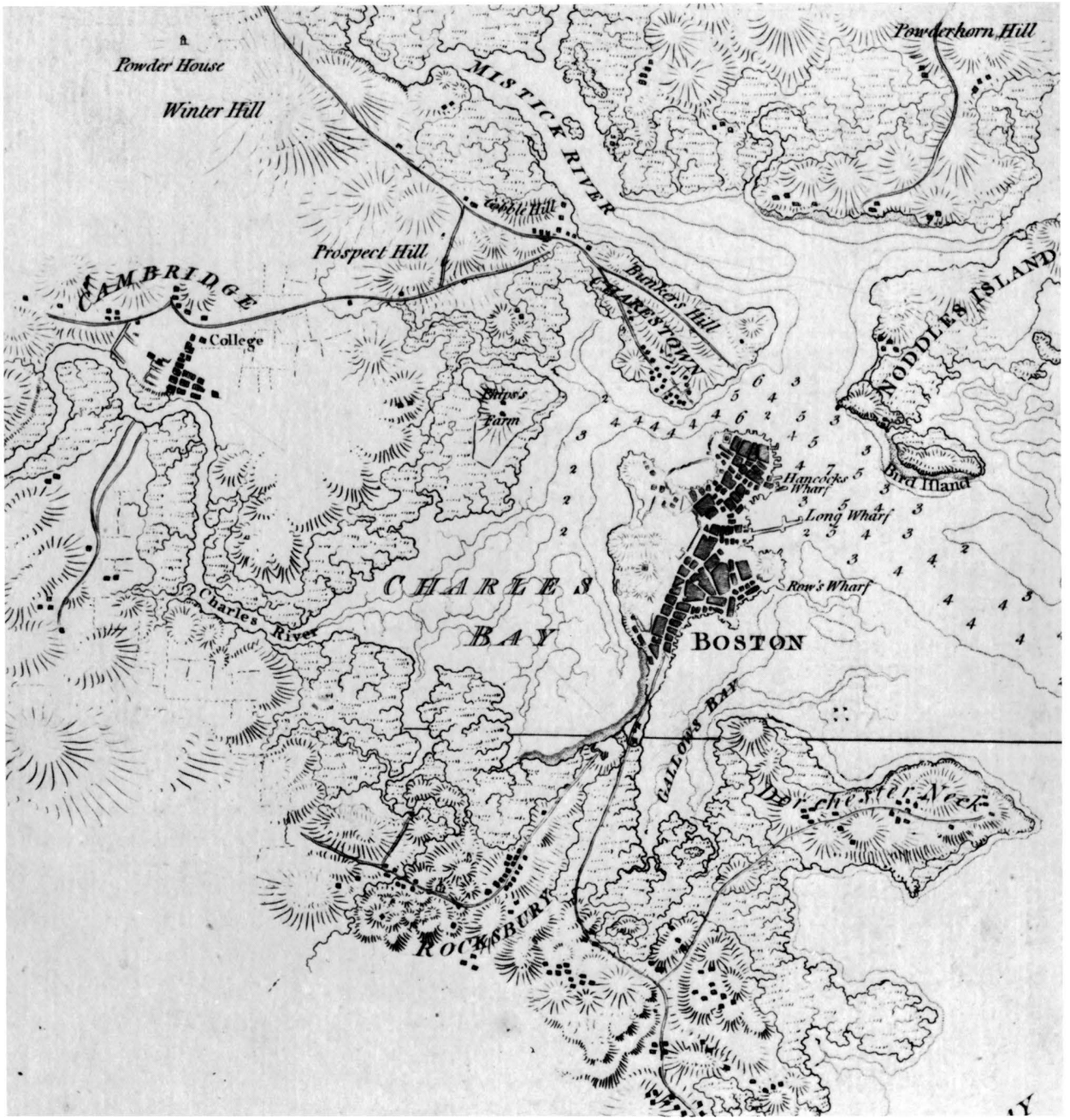


12. Plan of the Phips farm, 1759, redrawn in the 19th century from the original, now lost

(Figs. 11 and 12). Of these, the bequest to Mary Lechmere was the most important for the later development of East Cambridge. She received 42¾ acres of upland, including the "large barn and old haous" that had survived the fire and 11½ acres of marsh just north of the Great Dam. Her husband, the wealthy Loyalist Richard Lechmere, later bought out some of the other heirs: 38¼ acres from David Phips in 1772 and 45¼ acres with "large Dwelling house" (the Haugh house or its successor) from Elizabeth Vassall's heirs in 1762. This gave the Lechmeres control of all of the upland and most of the marsh north of the Great Dam, an area that became known as Lechmere's Point.

Access to the Phips farm and Lechmere's Point had not improved greatly since the 17th century; it was still much more accessible from Boston than from the rest of Cambridge (Figs. 13 and 14). The landing place on the Miller's River was granted to all the Phips heirs in common, indicating that this was still the best, and perhaps the only, good water access to the property. The public way into the Phips farm from the Charlestown-Watertown road was along a 17th-century lane that branched off at a public watering place near the present Union Square in Somerville. In the 17th century, this lane was called "the way from Haugh's farm" or "the way over stick bridge." An 18th-century ref-



13. Boston and environs, 1775, from the *Atlantic Neptune*

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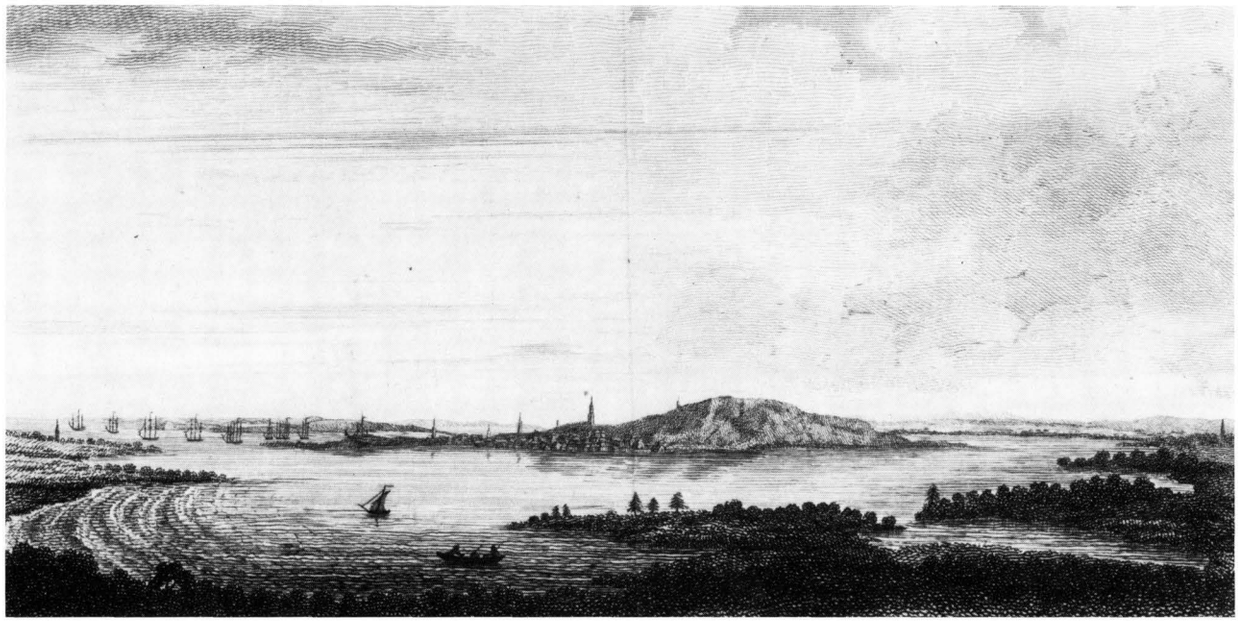

14. View of Boston from Willis Creek, 1775, from the *Atlantic Neptune*

erence suggests that it was sometimes used as a shortcut to Boston. The lane's surviving remnants include portions of Newton Street, Webster Avenue, and the L-shaped bend in Columbia Street just east of Webster Avenue in Somerville.

Other roads approached the farm from the south and west, but these were private rights of way, granted to specific individuals for access to a single parcel. The deeds of both upland and marsh lots mention these rights of way, such as the "privilege of passing with a cart or other ways on the south side of the dam" granted in a 1788 deed. Such rights evidently increased traffic into the point somewhat, but the area was still remote, as a 1754 account of a bear wandering on the Phips farm indicates.

When the Lechmeres acquired the East Cambridge land, they lived at 145 Brattle Street, near other wealthy Loyalists, and presumably rented the farm on Lechmere's Point. In 1771, the Lechmeres moved to Boston. They later fled to England and never returned. Their land was confiscated by the General Court along with most of the Tory estates on Brattle Street.

East Cambridge in the Revolution, 1775–76

Nov. 9, 1775 – Cannon fired much from 12 to 3 o'clock; about 400 or 500 Regulars landed on Lechmere's Point and carried off 1 cow. They were soon drove off by a party of our soldiers. We lost 1 man killed, and 1 mortally wounded. What they lost, cannot tell.

Diary of the Reverend John Marrett, in Brown, *Beneath Old Roof Trees*

East Cambridge played a significant role in the early days of the Revolution (Fig. 15). Both its isolation and its proximity to Boston made Lechmere's Point an attractive landing place for the British. On the evening of April 18, 1775, at high tide and under cover of darkness, British troops in Boston crossed the river in longboats and landed unobserved near the present intersection of Second and Otis streets. Marching over the hill, they waded across the creek by the usual landing place and followed the lane from the Phips farm to Washington Street and then took Milk Row (now Bow Street and Somerville Avenue) out to Lexington and Concord. Tradition says that the sole occupant of the point that night sounded the alert, but this cannot be verified.

After General Washington arrived in July and reorganized the army, the Americans were successful in repelling British attempts to cross from Boston to Lechmere's Point. Several eyewitness accounts describe the British landing on November 9, 1775. General Heath wrote:

At the top of high water, the tide being very full, some British Light Infantry, in boats, came over from Boston, and landed on Lechmere's Point. The sentinels on the point came off; the alarm was given; and several hundred Americans forded over the causeway, in the face of the British, the water at least two feet deep. The British, seeing the spirit of the Americans, although they were very advantageously posted, made a precipitate retreat to their boats. (Heath, p. 23)

Within a month of the landing, the fortification of Lechmere's Point was begun. That same November, Washington wrote that he had ordered two half-moon batteries built for occasional use along the east edge of Cambridge and "another work at the causey going on to Litchmore's Point to command that pass" (Washington, Nov. 1775). In December, a new causeway was begun over the marsh to Lechmere's Point, and three hundred troops under General Putnam began work. While under construction, Fort Putnam was heavily bombarded by British warships, and the fortifications were made more extensive than originally planned (Fig. 16).

Originally intended to be only a bomb battery, Fort Putnam as completed consisted of two redoubts and several bastions holding heavy cannon, which were

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used in the final bombardment that forced the British to leave Boston. It was described in the 1820s as displaying "more science in its construction and [having] a wider and deeper fosse than most of the other fortifications" (Frothingham, *Siege*, p. 410). The fort was situated on top of the hill, with the north bastion near what is now Fourth and Otis streets and the south bastion near Third and Thorndike streets.

When the bombardment of the British in Boston began on March 2, 1776, the defenders of Lechmere's Point were active participants. But the evacuation of the British from Boston on March 17 marked the end of East Cambridge's involvement in the Revolution, and the point returned to its former obscurity until after the war.

In the 1820s, a church was built on part of Fort Putnam. An observer described the scene:

Upon one angle of the fort, where the cannon were pointed with most destructive effect, a church is now erecting; and when I visited the spot, the carpenters were busily engaged in preparing the wood-work in one of the bastions. The glacis, the counterscarp, the embrasures, the covered way, and the batteries, are fast disappearing. Diggers of gravel on one side, and builders on the other, were busily employed in completing the destruction of the strongest battery erected by the army of America, and were thus achieving, without opposition, that which an enemy could not effect. (*Frothingham, Siege*, p. 410)

15. Boston and vicinity during the siege of the British, 1775–76

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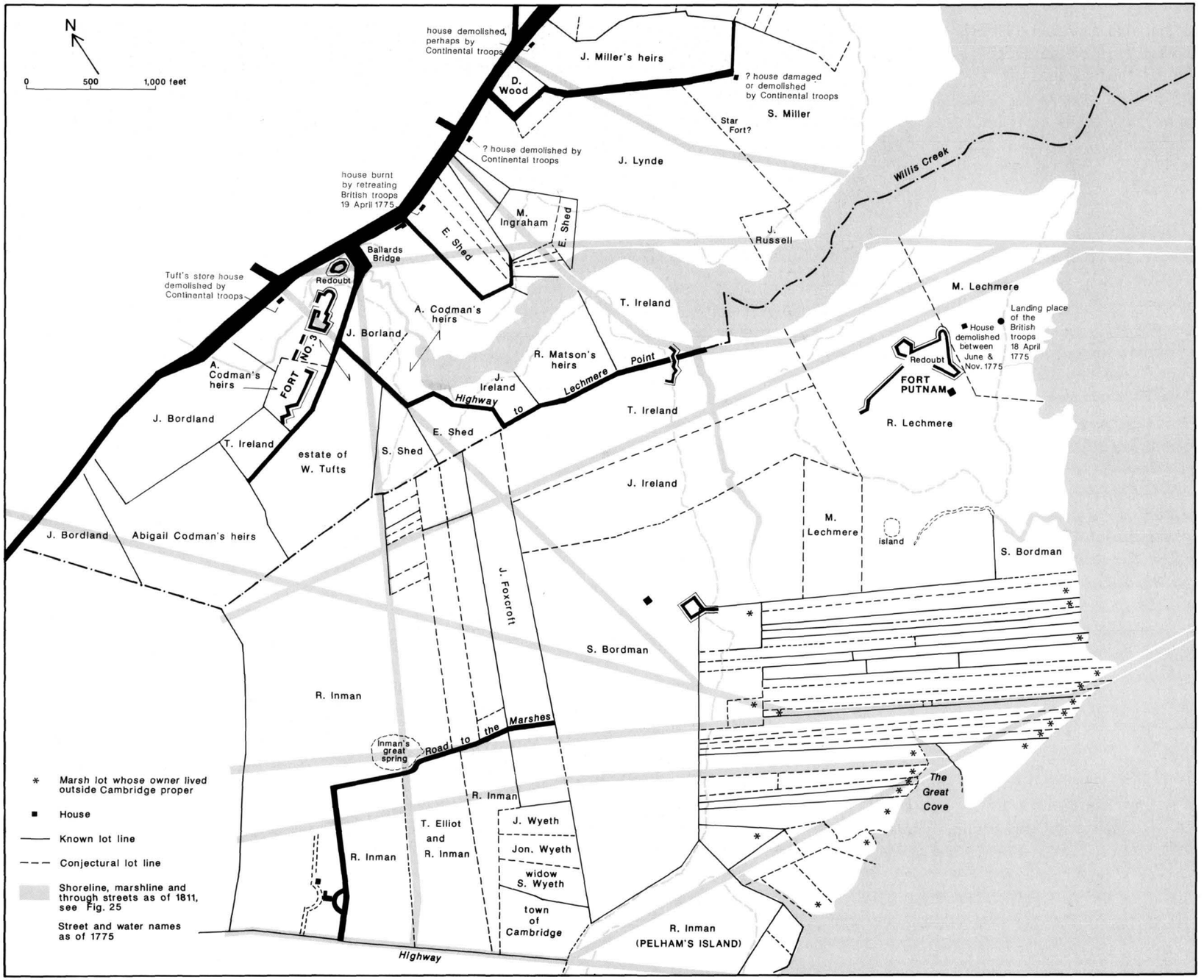

16. East Cambridge, 1775, showing revolutionary fortifications

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Lechmere Point Corporation,

This Certifies that Samuel Torrey of Boston is PROPRIETOR of Twelve Shares N°. 1 to 12 inclusive in the Corporate Property of LECHMERE POINT CORPORATION; and entitled to all the rights privileges and profits belonging to the same, subject to all the assessments which may be legally imposed on said shares, and to the rules and bye Laws of the Corporation.

And this Certificate is transferable only by the said Samuel Torrey his attorney, executors, or administrators, on the Books of the Corporation.

Jno Callender Clerk.

Boston April 1st 1810

Andw Craigie President.

16a. Lechmere Point Corporation stock certificate issued to Samuel Torrey, April 1, 1810. Signed by Andrew Craigie, president

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Andrew Craigie, the Canal Bridge, and the Lechmere Point Corporation

Before the erection of a bridge across [the] Charles River, connecting Cambridge with Boston, the lands in the easterly part of Cambridge were chiefly valued for the abundance of hay and forage, which the salt marshes furnished. These marshes, extending far out from the banks of the river, composed the principal part of those lands. The situation was very uninviting. The grounds lay low. There were no roads. Access could not be had to the capital, excepting by boats, only by the circuitous route of Roxbury or Charlestown. It was a sort of insulated tract, detached from every other.

Dr. Abiel Holmes, *Memoir of Cambridgeport . . .*, 1814, p. 5

Andrew Craigie, 1754–1819

The prime figure in the development of East Cambridge in the 19th century was Andrew Craigie, an accomplished speculator in land and securities at a time when speculation was an accepted means of accumulating capital (Fig. 17). We know little of Craigie's early life, but correspondence and contemporary records provide some clues to the background and motives of this man who was so important in shaping East Cambridge.

Born in Boston in 1754, Craigie was the fourth of five children of Captain Andrew Craigie, a master of ships sailing between Boston and London who was appointed warden of the port of Boston in 1764. At the age of nine, young Craigie entered the Boston Latin School, where he studied with such sons of prominent Boston families as William Eustis and Christopher Gore, both later governors of Massachusetts. These early friends served with Craigie in the Revolutionary War and became extremely important in his later business dealings.

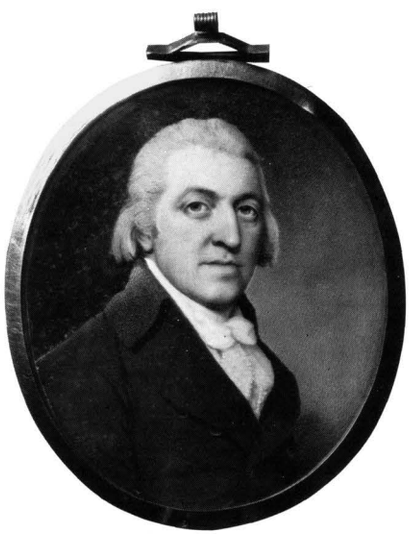
Captain Craigie died in 1766, and it is not known how long Andrew remained in school, although the captain's will provided for the education of his two sons. Indeed, nothing more is known of Andrew Craigie's life until April 30, 1775, when, at the age of twenty-one, he was appointed by the Committee of Safety of the Province of Massachusetts to take charge of the medical stores for the military. After the Battle of Bunker Hill, in which Craigie participated, the Massachusetts Provincial Congress appointed him a medical commissary and apothecary for the Massachusetts army at £5 per month. Craigie's training for this position has never been determined, but contemporary sources indicate that during this period he was well thought of and respected for his skills.

The medical department of the army was formally organized later in 1775, and Dr. Benjamin Church was elected the first director and chief physician. A member of the Massachusetts Provincial Congress and a former director of the military hospital at Cambridge, Church must have known Craigie well and soon named him apothecary to the army. Church, dismissed for treason after only three months, was succeeded by Dr. James Morgan, who abruptly dismissed Craigie and replaced him with an incompetent pupil. By January 1777, Craigie had been reinstated and, when the medical department was reorganized in April, was appointed to the new office of apothecary general, in charge of purchasing medicine for the American army. He held this position until November 1783 and attained the rank of lieutenant colonel.

During his army service, Craigie evidently amassed a sizable fortune by speculating in U.S. Government securities. In 1782, well before the end of the war, William Eustis wrote to Craigie, asking whether he had "a mind to speculate" (Pratt, p. 53). Correspondence with Christopher Gore in the 1780s also reveals Craigie's penchant for speculation; it is filled with such phrases as "shall we speculate" and "I will keep on buying" (Gore to Craigie, Jan. 7 and Oct. 4, 1788). In the summer of 1783, Apothecary General Craigie asked Gore to examine his personal accounts and to make further purchases. Later letters reveal that Gore acted as Craigie's legal and commercial agent throughout this period and give some idea of the magnitude of their foreign and domestic deals. They also refer to individuals, such as Harrison Gray Otis, who were later involved in Craigie's speculation at Lechmere's Point.

After the war, Craigie moved to New York City, where he ran an extensive wholesale drug business under the name of Craigie, Wainwright & Company. During this period, he also lived in England. After his drug business terminated in 1789, he described it as one "by which I lost very considerably" (Pratt, p. 55), but he had also continued his financial speculations, which presumably were more profitable.

Craigie's land speculations directly after the war were also extensive, and no doubt prepared him for his venture in East Cambridge. Some were rather unsavory and reaped the disfavor that he later received



17. Andrew Craigie (1754–1819), miniature attributed to Archibald Robinson, date unknown

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for his East Cambridge dealings. Through his war connections, he became involved in one of the most notorious land speculation schemes of the period, the Scioto affair in Ohio in the 1780s. Craigie is said to have joined this venture because he wished to strengthen his ties with William Duer, a prominent New York merchant, speculator, and assistant secretary of the treasury under Alexander Hamilton.

Even with these connections, the project turned out disastrously, and those involved were accused of corruption. While Craigie admired Duer and his vast speculations, he was also cautious. When he and Duer were appointed in 1790 to straighten out the Scioto Company's finances, Craigie was careful to ensure that he could not be held personally liable. In 1792, when Duer fell into bankruptcy, Craigie resigned from the company and surrendered his shares for the benefit of the other members rather than continue any association with the group. Had the project succeeded, Craigie would have reaped substantial profits; instead, he was able to withdraw without too great a loss.

Craigie also bought considerable acreage in Maine, Vermont, and New York for speculation during the 1780s and early 1790s, sometimes acting as agent for various land companies. During the same period, he continued to buy and sell large amounts of government securities, and he served on the Board of Directors of the new Bank of the United States, in Philadelphia. In 1791 Robert Morris, an associate of Craigie's in the bank, described him as a "quick, sly, sensible and penetrating [man who] will try to discover your business and conceal his own" (Livermore, p. 202). In 1793, Craigie was still considered an astute financial adviser and a man of unblemished character.

After concluding his drug business in New York, Craigie turned his attention toward Massachusetts, where the remaining members of his family lived. His brother-in-law Bossenger Foster was already a close business associate and handled Craigie's business affairs in Boston.

In 1790, when the Henry and John Vassall houses (now 94 and 105 Brattle Street) and the accompanying estate of about 150 acres became available, Craigie instructed Foster to make an offer to purchase the property (Fig. 18). Craigie had served at these confiscated Tory residences during the Siege of Boston, when 94 was the medical headquarters and 105 was General Washington's residence. He was doubtless excited about the idea of becoming the proprietor of such a prestigious estate, although the houses themselves were said to be in poor condition. Craigie instructed Foster, "if he [the agent] will take $9000 for the pitiful place payable in 3 or 4 years with interest and you cannot secure it on better terms, I should acquiesce" (Oct. 26, 1790). The final purchase was concluded in March 1791 for the sum of £3,750, which was considered to be a great bargain – about half the property's value.

After directing Foster from New York for almost a year about the elaborate refurbishing of the house, Craigie moved to Cambridge in 1792, and 105 Brattle Street became the center of a lavish social life. The next year, at the age of 39, he married Elizabeth Shaw, a woman who was twelve years younger and known for her beauty.

Even before settling there, Craigie had ideas for investment and development in Cambridge. On January 31, 1792, he wrote to Foster about a bridge, stating cryptically that "I shall be pleased on other than merely selfish accounts if my idea is thought by the wise men a proper one and if I am allowed to carry it into effect on liberal principles." A month later, he wrote that he had told his old friend and business associate William Eustis about the bridge and "authorized him to do what shall be necessary in this business" (Feb. 5, 1792).

In this period, many of the most powerful political interests in the commonwealth were focused on projects to link Boston with its hinterland by constructing bridges and turnpikes. As early as 1720, Boston's town meeting had considered a proposal to replace the Charlestown ferry with a bridge, and in 1738 Boston landowner John Staniford unsuccessfully applied to the General Court for permission to construct a bridge from Boston to the Phips farm. After the Revolution, new proposals surfaced. In 1785, Andrew Cabot, who had purchased the confiscated Lechmere estate from the commonwealth, petitioned to build a bridge from Lechmere's Point to Barton's Point in Boston. This petition was rejected in favor of a proposal by John Hancock and his associates, who opened the Charles

18. Vassall-Craigie House, 105 Brattle Street, 1759, 1793

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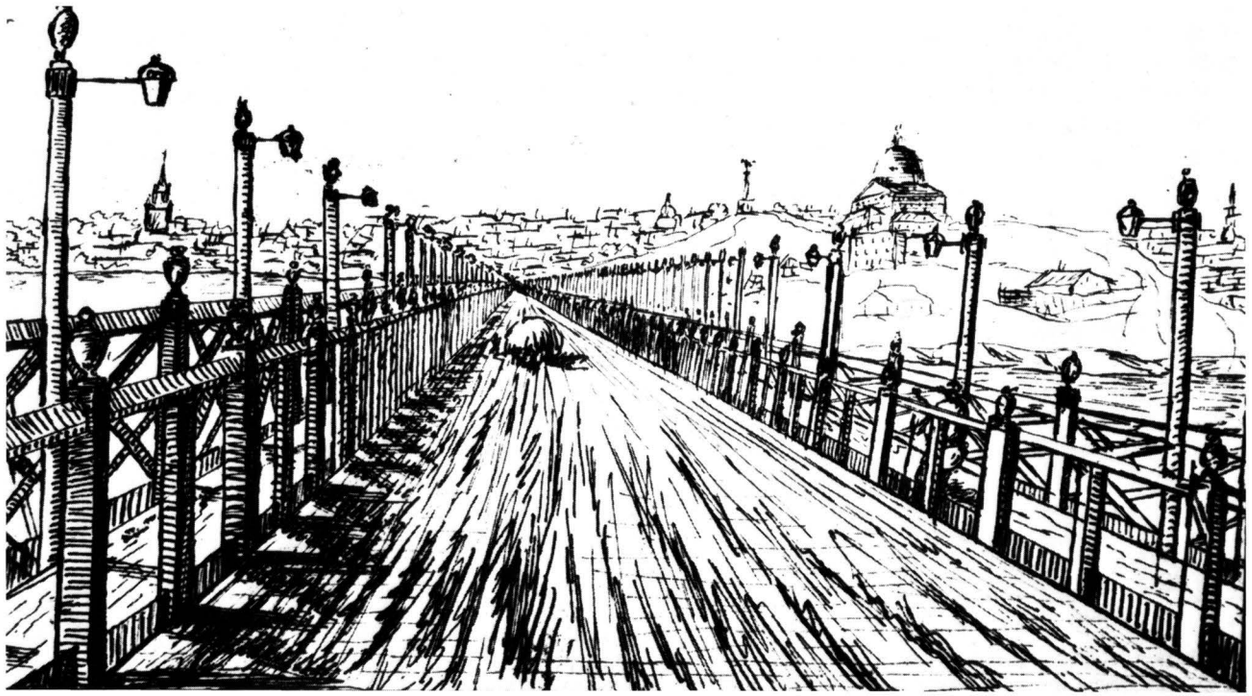

19. West Boston Bridge, 1793. 1797 view toward Boston

River Bridge between Boston and Charlestown in 1786.

Cambridge interests were not long denied. Between January and March of 1792, a group headed by Judge Francis Dana, the minister plenipotentiary to Russia in 1781–83 who was currently chief justice of the Supreme Judicial Court, sought public subscriptions for a new bridge; its members were incorporated as the Proprietors of the West Boston Bridge, to be built from Boston to Pelham's Island in Cambridge. This required a 3,300-foot causeway across the marsh from Pelham's Island (near Lafayette Square) to a point near Kendall Square, as well as a 3,500-foot timber bridge to Boston (Fig. 19).

The completion of the bridge provided the impetus to develop a commercial and residential center in what is now Cambridgeport. It is not clear from his letters whether Craigie wished to be involved in the West Boston Bridge, but it seems likely from later events that the proprietors rejected his interest; this may have inspired him to develop his own project to link Lechmere's Point to Boston. According to Lucius Paige, the rivalry between the two groups "for several years kept the town in constant excitement and turmoil" (Paige, p. 203).

In 1793, Craigie became involved in the Middlesex Canal, which was projected to connect the Merrimack River at Chelmsford with Boston Harbor by way of the canal's terminus at the millpond at Charlestown, across the Miller's River basin from Lechmere's Point (see Fig. 22). The canal was begun in September 1794, shortly before Craigie began buying land in East Cambridge, and was completed at the end of 1803, just before Craigie petitioned for his bridge. One immediate effect of the canal project must have been to increase the value of all the upland surrounding the basin, including Charlestown, Barrell's Point, and Lechmere's Point.

The canal project involved individuals who were later important to Craigie's East Cambridge development. Although Craigie was not one of the original Middlesex Canal incorporators, he was a member of the first Board of Directors, along with his classmate Christopher Gore and two other men who also became governors of Massachusetts, John Brooks and James Sullivan.

Craigie began purchasing land in East Cambridge in January 1795 (Fig. 20). Not wishing to disclose his plans, he commissioned friends and relatives to buy land in their own names; he acquired no land in his own name until 1803. Craigie commenced by arranging for Seth Johnson, his financial agent in New York, to buy the three parcels of the old Phips farm assembled by Andrew and John Cabot for £3,300 in 1795 and to convey them to Bossenger Foster in 1797 for a nominal sum. However, in 1795 Seth Johnson mortgaged the parcels back to John Cabot for £2,200, presumably without the knowledge of Craigie and Foster. In 1800, Cabot repossessed the property. In 1803, Cabot sold for more than $4,000 "grantor's right in the farm called Litchmore's Point" to Samuel Parkman, a Boston merchant who was active in developing Boston's West End and to whom Craigie owed over $5,000. In 1806, Parkman sold these mortgagor's rights to Craigie. Foster had died in 1805, and Craigie did not receive full title to this land until January 26, 1807, when this interest was deeded to him by Foster's widow, his sister.

A transaction involving the Lechmere family directly is often cited to illustrate Craigie's devious nature. In 1791, Richard Lechmere had written from England to his Boston lawyer announcing his willingness to sell Mrs. Lechmere's reversionary rights to his "farm on Cambridge neck," which had been "so crule and unjustly taken from her" during the war. The rights to this land were purchased in 1799 by Samuel Haven of Dedham, whose wife was Craigie's niece. By having

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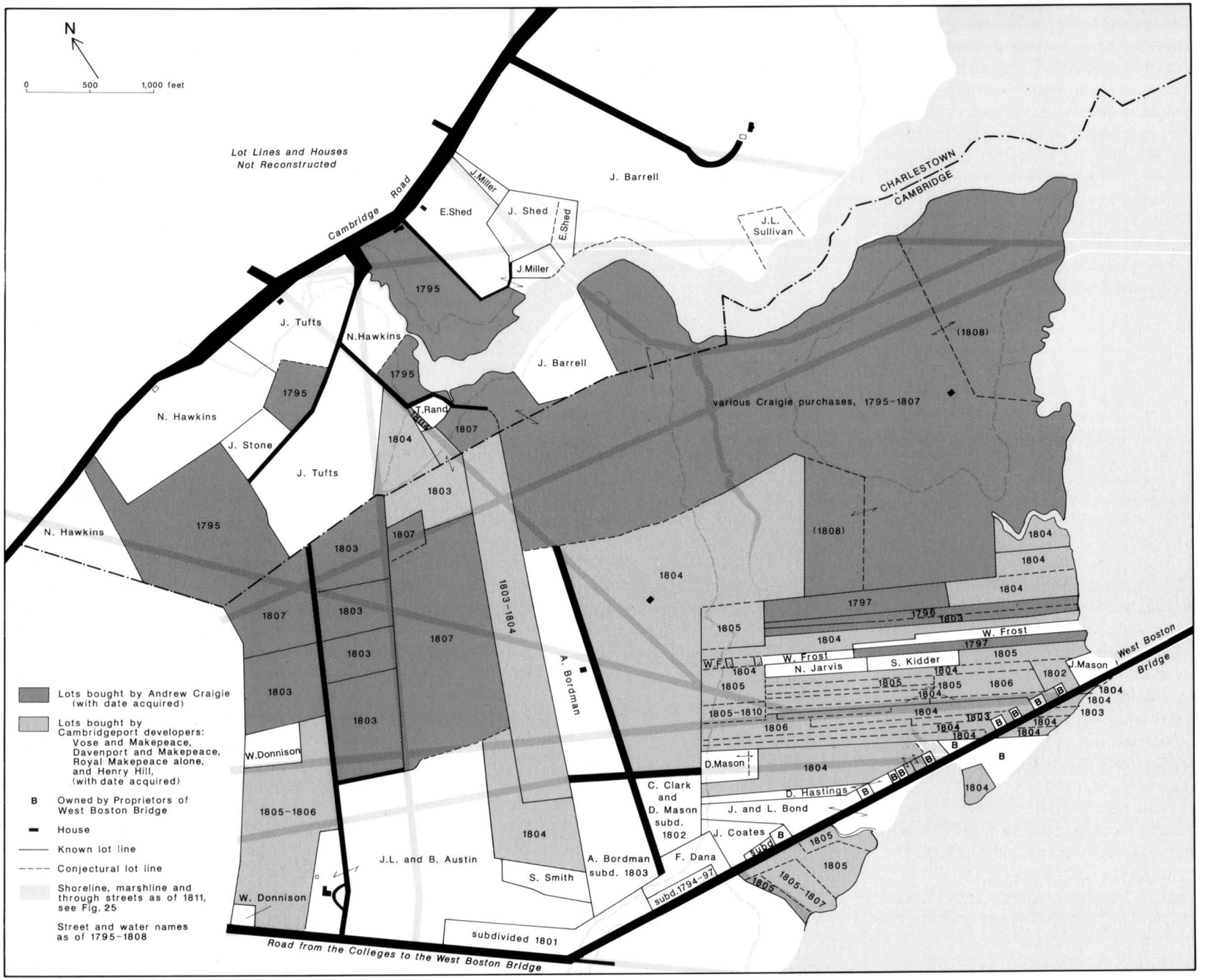

20. Andrew Craigie's land purchases, 1795–1808, based on original deeds

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Haven hold these rights, which were in conflict with the commonwealth's warranty deed conveying the Lechmere property to Andrew Cabot in 1779, Craigie could maintain that the title was defective and that the commonwealth was liable for damages. Craigie did not acquire these rights in his own name until September 20, 1808, when the General Court required him to release all claims for damages as a condition for receiving a charter for the Canal Bridge.

During the same period, Craigie also purchased numerous long, narrow lots in the salt marsh between the East Cambridge upland and the West Boston Bridge. His earliest recorded purchase in this area was in 1796, and he continued to buy land in the marshes through 1808 (see Fig. 20). Here he was in direct competition with Cambridgeport proprietors Royal Makepeace and Rufus Davenport, who, like Craigie, purchased marsh lots surrounding East Cambridge in these years. By 1808, Craigie, Makepeace, and Davenport held title to most of the marshland north of Broadway and south of what is now Charles Street, but none of their holdings formed a continuous parcel, so little could be done with them. Craigie later kept these lots as part of his own estate rather than assigning them to the Lechmere Point Corporation.

Craigie's land acquisitions were not confined to the eastern part of Cambridge during this period. He also purchased major parts of the Jarvis estate, stretching from Elm Street west to between Maple and Fayette streets. The southern boundary of Craigie's property here was Spring Lane between Inman and Elm streets and a line 250 to 350 feet north of Broadway and west of Inman Street. The northern boundary of this property was the Charlestown (now Somerville) line except for the area between Prospect, Cambridge, and Elm streets, which belonged to Makepeace and his friends.

Between the Jarvis property and the western edge of the Phips estate, Craigie was again in competition with Makepeace, for the land remained in the hands of Henry Hill, Makepeace's friend. On the northern edge of his property in Charlestown, Craigie had also assembled a large amount of land, but none of it formed a contiguous parcel because Makepeace was buying in the same area. Perhaps Craigie had even larger plans than his East Cambridge development, for he controlled parts of both the north and south banks of the Miller's River, but he was hampered on all sides by Makepeace and the Cambridgeport interests.

During these years of extensive purchases in Cambridge, Andrew Craigie suffered the first of many financial reverses. In August 1798, the partnership of Horace and Seth Johnson in New York failed; it had handled substantial investments for both Craigie and Foster. Craigie went to New York to determine the extent of their losses and advised Foster to consult with Harrison Gray Otis, to make arrangements with the banks in Boston, and to advise Mrs. Craigie on how to act in case an attachment suit was brought against him. Later correspondence from Foster's son indicates that Craigie was virtually imprisoned in his house for a time to escape his creditors. As with many of Craigie's business affairs, details of how he disentangled himself are not known, but he wrote to Foster that he saw a way out for himself, with no loss to Foster, although they would have to "sing small" for a while (Aug. 11, 1798). Part of the resolution of his financial affairs involved the Lechmere's Point property, which had been mortgaged by Johnson before he sold it to Foster. In 1799, Craigie and Foster put fourteen properties, including Lechmere's Point, in trust to cover debts owed to nine Boston merchants in the amount of $37,660.01. Most of them were prominent Bostonians involved in developing various areas in Boston, and the incident gives some idea of the range of Craigie's connections and business deals.

Without this financial setback and the difficulty with the land titles, Craigie's East Cambridge project might have gone forward earlier, and Craigie might have done more on his own rather than relying on a corporation to handle land development. As it turned out, the timing was good: the completion of the Middlesex Canal on December 31, 1803, lent credibility to his own bridge project, and in 1805 commercial attention was focused on the eastern edge of Cambridge when Congress enacted a bill that annexed "the town or landing place of Cambridge" to the district of Boston and Charlestown as a U.S. port of delivery. Craigie or one of his relatives now held title to the entire upland in East Cambridge, and he was ready to pursue his plans for a bridge to make his land accessible to Boston and desirable for development.

The Canal Bridge Project, 1805–9

I rode to Mr Craigie's New Toll Bridge. This is a very beautiful piece of Architecture, lately built by Mr Craigie of Cambridge, at his own Expence, over Charles River, in sight of West Boston Bridge, and about the same length & Plan, by which the road to Cambridge is much shortened.

Elias Boudinot, *Journey to Boston in 1809*, p. 73

In 1805, Craigie petitioned the General Court for permission to build a bridge from Lechmere's Point to Boston and hired the cartographer Osgood Carleton to survey a location for it. Craigie's was not the only bridge scheme for this site. The Middlesex Canal Corporation and the Newburyport Turnpike proprietors both submitted petitions to the General Court between 1805 and 1807 to build bridges in the same general location. The three groups finally agreed to erect a bridge in common, for the benefit of all, although the canal and turnpike corporations were concerned that Craigie's East Cambridge bridgehead seemed to provide greater benefit to him than to the others.

After considerable controversy over the location, the General Court passed an act on February 27, 1807, incorporating Andrew Craigie and twelve associates as the Proprietors of the Canal Bridge for the purpose of erecting a bridge and causeway from Leverett Street in the West End of Boston to Lechmere's Point, with a further connection to Barrell's Point in Charlestown (Fig. 21). Joseph Barrell, whose estate stood on Barrell's Point, had served with Craigie on the board of the Middlesex Canal; a bridge from Lechmere's Point to his estate appears on one map, but there is no documentary evidence that it was ever built. To design his bridge, Craigie hired the engineer of the Middlesex Canal, Loammi Baldwin; unfortunately, his drawings have not been found.

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21. Location of Craigie's (Canal) Bridge and Prison Point Bridge

22. The Boston area in 1819, showing the Newburyport Turnpike, the Middlesex Canal, and the Prison Point and Craigie bridges

The 1807 charter stated that the toll bridge would serve the public interest by providing access to Boston from the Middlesex Canal and the Newburyport Turnpike, both of which terminated on Charlestown Neck at what is now Sullivan Square. The charter divided the shares in the new bridge equally among Andrew Craigie, the Middlesex Canal Corporation, and the Newburyport Turnpike Corporation, and required the companies to build roads or canals to the bridge. The Charles River Bridge in Charlestown already provided a more direct route to Boston from both the canal and the turnpike, but involving the two corporations probably helped Craigie get permission for his bridge through the General Court (Fig. 22).

Even before the Canal Bridge was authorized, the state granted a charter in 1806 to the Proprietors of the Prison Point Dam for the purpose of building a dam from Prison Point in Charlestown to Lechmere's Point and erecting tide mills on it. This was three years after the completion of the Middlesex Canal, and the charter granted rights to its proprietors that included locks, a wharf, and a mill. The dam was never built; instead, the Prison Point Bridge was erected in 1815.

The Canal Bridge met substantial opposition from a variety of groups, but particularly from the Proprietors of the West Boston Bridge, who believed that any nearby bridge would hurt their business. When the West Boston Bridge was built in 1793, its proprietors had to pay an annual indemnity to Harvard College to compensate for the revenues lost by the Charles River Bridge, which paid a percentage of its profits to the college. The charter of the Canal Bridge relieved the West Boston Bridge proprietors of part of this burden by requiring the proprietors of the new bridge to pay half of the annuity to Harvard. The charter further reduced the Canal Bridge's profits by requiring its proprietors to pay ten cents per ton to every loaded vessel passing through its draw. The existence of the West Boston Bridge as a profit-making entity was also extended for seventy years beyond the completion of the new bridge. These concessions did not mollify the Proprietors of the West Boston Bridge, who went so far as to offer to sell their bridge to Craigie or move it to Lechmere's Point.

Other groups and individuals also opposed Craigie, saying that he had changed the proposed location of the Cambridge end of the bridge to enhance the value of his own property without regard for the public interest. Still others questioned Craigie's secretive methods of enrolling shareholders and refusing to submit his lists of subscribers to public scrutiny, as the Middlesex Canal and Newburyport Turnpike proprietors had done.

The General Court made additional demands on Craigie in 1808, requiring him to release the commonwealth from all claims for damages on account of a purported breach of the covenants of warranty relating to the reversionary rights of the Lechmere family held by his niece's husband, Samuel Haven. Craigie thought that he should be compensated for the imperfect title granted by the commonwealth, but the General Court ruled that permission to build a bridge directly to Boston was compensation enough and declared the bridge charter invalid if he did not comply.

On February 26, 1808, one year after the original charter, the issue became so heated that the General Court passed an amendment to the charter, appointing an impartial committee to determine the exact location for the west end of the bridge. It also described the Middlesex Canal Corporation's rights to cut a canal and towpath across Lechmere's Point to link the Miller's and Charles rivers and outlined alternate plans in case Craigie did not release the covenant of warranty by a certain time. Later that year the bridge was finally begun, but Craigie and his opponents continued to file petition after petition with the General Court to decide such issues as just compensation and location of access roads.

Some of the most bitter debate centered on the new roads that would lead to the two bridges (Fig. 23). As early as 1805, Cambridge had appointed a committee to present a petition to lay out a new road, Mt. Auburn Street, from Gerry's Corner (now Elmwood Avenue at Fresh Pond Parkway) to Brattle Square, to reduce the distance from Watertown to the West Boston Bridge. By this time, however, Craigie's plans for developing East Cambridge were fairly well established, and he proposed an alternate road across his Brattle Street estate to connect with Mason Street, thus making the

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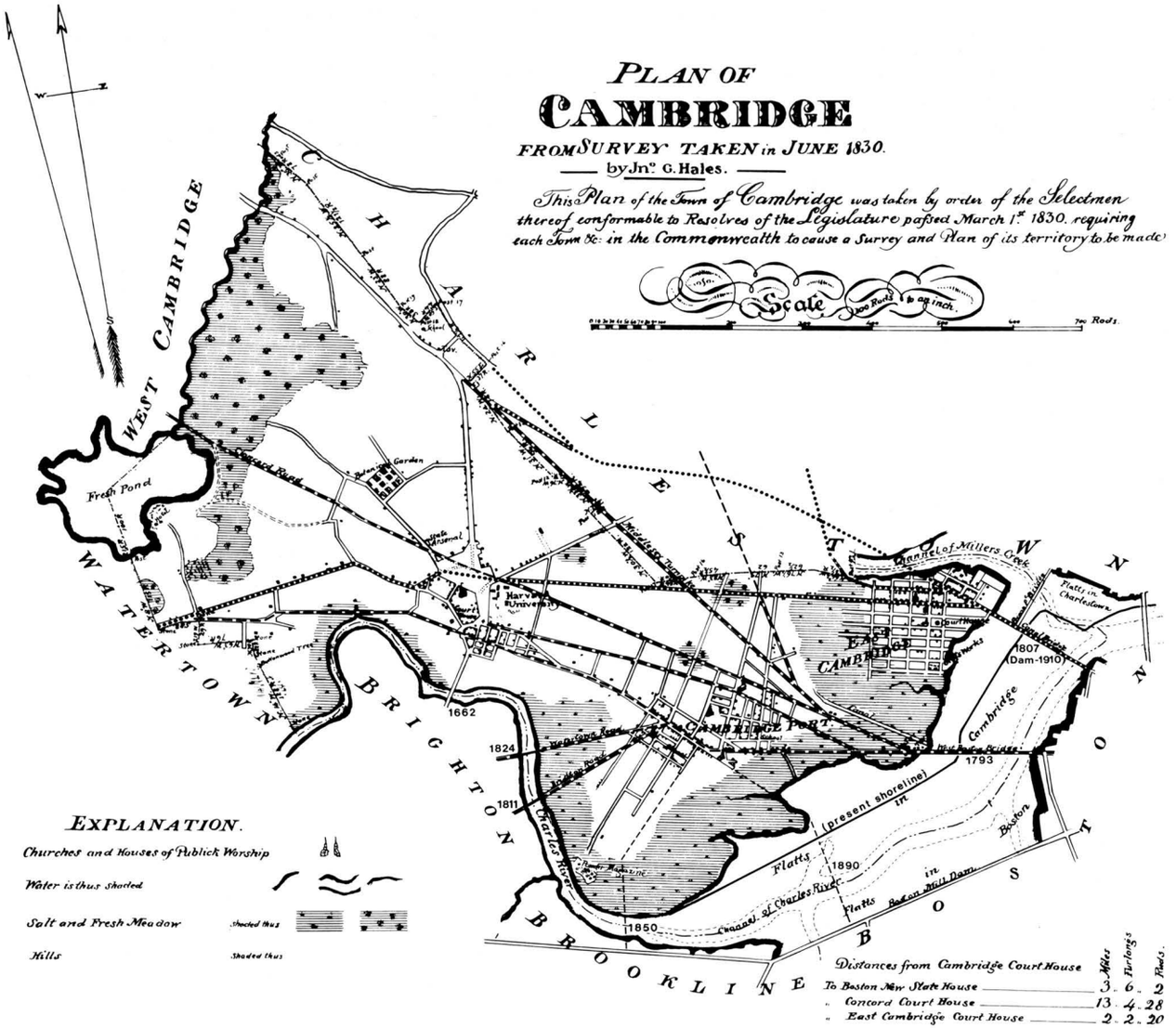

23. Cambridge in 1830, showing roads built to approach the Craigie and West Boston bridges

route from Watertown to Lechmere's Point more direct. So convincing was Craigie and so attractive was his offer to pay for the part of the road crossing his land that, in 1807, the selectmen laid out the road as he desired. The town would not accept it, however, and by 1808 had reverted to the original plan for Mt. Auburn Street, to the advantage of the West Boston Bridge and Cambridgeport factions. But Craigie did not give up easily; on May 16 he and thirty-five others so violently protested the laying out of Mt. Auburn Street that the town voted to appoint the selectmen as a committee "for the purpose of prosecuting Andrew Craigie and others for trespasses committed . . . upon the road" (Paige, p. 204). Craigie continued to file numerous petitions to block the road and to obtain, if not his preferred route, at least some work on Brattle Street west of Fayerweather that would straighten the route to East Cambridge.

At the same time, Craigie and his associates were overseeing the construction of Cambridge Street from the Canal Bridge to the Cambridge Common and were petitioning to have it declared a public highway. They were hampered by Henry Hill, Rufus Davenport, and Royal Makepeace of Cambridgeport, who tried to protect the West Boston Bridge business by refusing to allow the new road to cross their property. This created a one-eighth-mile gap in Cambridge Street near Elm Street.

Craigie appealed to Boston merchant Thomas Handasyd Perkins, later one of the proprietors of the Lechmere Point Corporation, who petitioned the General Court in June 1809 to take the disputed land by eminent domain and complete Cambridge Street. This goal was finally achieved, although not without many remonstrances and counterpetitions, which described "the incessant machinations and intrigues of Mr. Andrew Craigie, in regard to roads," and stated that "few men are so old in the Legislature as to remember when Andrew Craigie and his associates were not Petitioners for some grant or indulgence from the Government." Perkins' petition was described as seeking "to lay out roads without number, with courses undefined" (Paige, p. 206). Craigie had the audacity to claim damages from the town in the amount of $1,327 for laying out the

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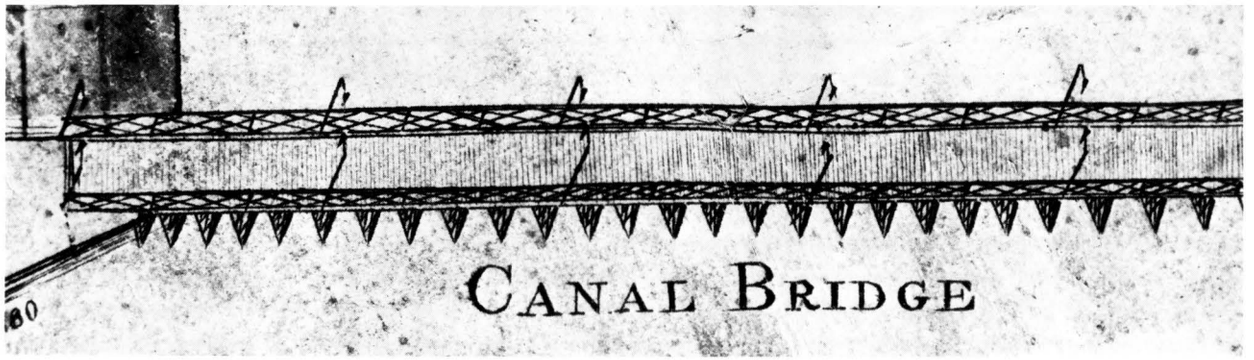

24. Craigie's (Canal) Bridge, detail from Tufts plan of East Cambridge, 1811

road that he had himself requested. The case dragged on until 1813, when the Court of Sessions finally ruled that Craigie had suffered no damages.

In spite of the general animosity toward Craigie, the Canal Bridge opened with appropriate ceremony on August 30, 1809, Harvard's commencement day (Fig. 24). Described in the newspapers as one of the handsomest structures of its kind, the bridge was 40 feet wide and 2,796 feet long, with a smooth gravel surface. One side was railed for the safety of pedestrians, and lamps at regular intervals burned until midnight. The tolls were the same as those for the West Boston and Charlestown bridges. The charter specified two draws for boats, but Craigie built the bridge with only one, saying that a second draw would provide no advantage to boats and would weaken the structure. With the bridge completed and the construction of Cambridge Street assured, Craigie's efforts turned toward developing his landholdings in East Cambridge.

Lechmere Point Corporation, 1808–22

In November 1808, with the bridge to Boston finally under construction, Craigie put his 300-acre holding on the market for $360,000, divided into sixty shares at $6,000 each. The property itself was not divided, but held by the shareholders as tenants in common (Fig. 25). Paige noted that Craigie had paid less than $20,000 for all his purchases. His list of subscribers reads like a *Who's Who* of early-19th-century Boston: Harrison Gray Otis, Thomas Handasyd Perkins, Ebenezer Francis, William Payne, and John Callender. At first, Craigie sold ten shares in November, 1808 and reserved fifty for himself, the largest purchasers being Otis and the merchant Israel Thorndike of Beverly, who each purchased three shares. By 1809, his old friend Christopher Gore was also involved. Many of Craigie's early purchasers were men with whom he had had prior business contact, either privately or through the Middlesex Canal Corporation. Most were already involved in land development schemes in Boston. They also had strong political connections and could help plead his cause before the General Court, as Perkins did in 1809 for the completion of Cambridge Street.

Even before the Canal Bridge was opened, some of Craigie's shareholders met on July 4, 1809, to discuss ways to make their property attractive to buyers. Their first decision was to enter into contracts with William Dickinson, a brewer, and James Foster, a "gentleman," to lease land for seven years to operate a brewery. Craigie, Payne, and Francis paid the cost of erecting the brewery, malt house, and barn on what became Third Street between Winter and Gore streets. Foster and Dickinson also ran a blacksmith shop.

The Lechmere Point proprietors, although not yet incorporated, entered into contracts in 1809 with Aaron Bigelow for a brick store and with Calvin Brooks to run a tavern. The proprietors also set up a committee to execute a contract for building the tavern as well as a barn and outbuildings near the junction of Bridge and Gore streets. These early contracts give an idea of the enterprises the proprietors thought would best promote their project. The locations they chose near the bridgehead suggest that they were hoping to attract commercial traffic from the western towns into Boston.

In November 1809, Craigie held the first full meeting of the shareholders and future proprietors of the Lechmere Point Corporation. Minutes of the meeting record a vote to lay out the land in salable lots. According to the contracts signed earlier in the year, the locations of some streets had already been determined, but none except Bridge, Cambridge, and Dam (East) streets appear to have been named. Also, no land had been sold; all the land in use had only been leased by the proprietors, who had erected all the buildings themselves.

The shareholders met every few weeks through the rest of 1809 and decided to acquire shares in the Canal Bridge and to build additional commercial establishments nearby: a hay scale, a blacksmith shop, and a cobb (stone) wharf on the Miller's River.

In January 1810, the proprietors submitted a petition to the General Court for incorporation as the Lechmere Point Corporation. The act of incorporation, which passed on March 3, established the corporation for a term of twelve years and gave it the power to improve its land by laying out streets and lots, building protective walls to control the surrounding water, and erecting buildings (Fig. 26). Shares in the corporation were not to exceed 1,200. The incorporators immediately appointed Craigie and Otis to work on securing two new roads to connect their bridge with Medford and Watertown.

Except for the minor commercial development that had taken place near the bridgehead since 1809, the area they were discussing was still a barren upland surrounded by marshes and tide flats and crossed by two roads, Cambridge and Bridge streets, which met near the bridge. Meanwhile, Cambridge was declared a U.S. port of delivery in 1805, and the Cambridgeport proprietors had developed a system of canals to accom-

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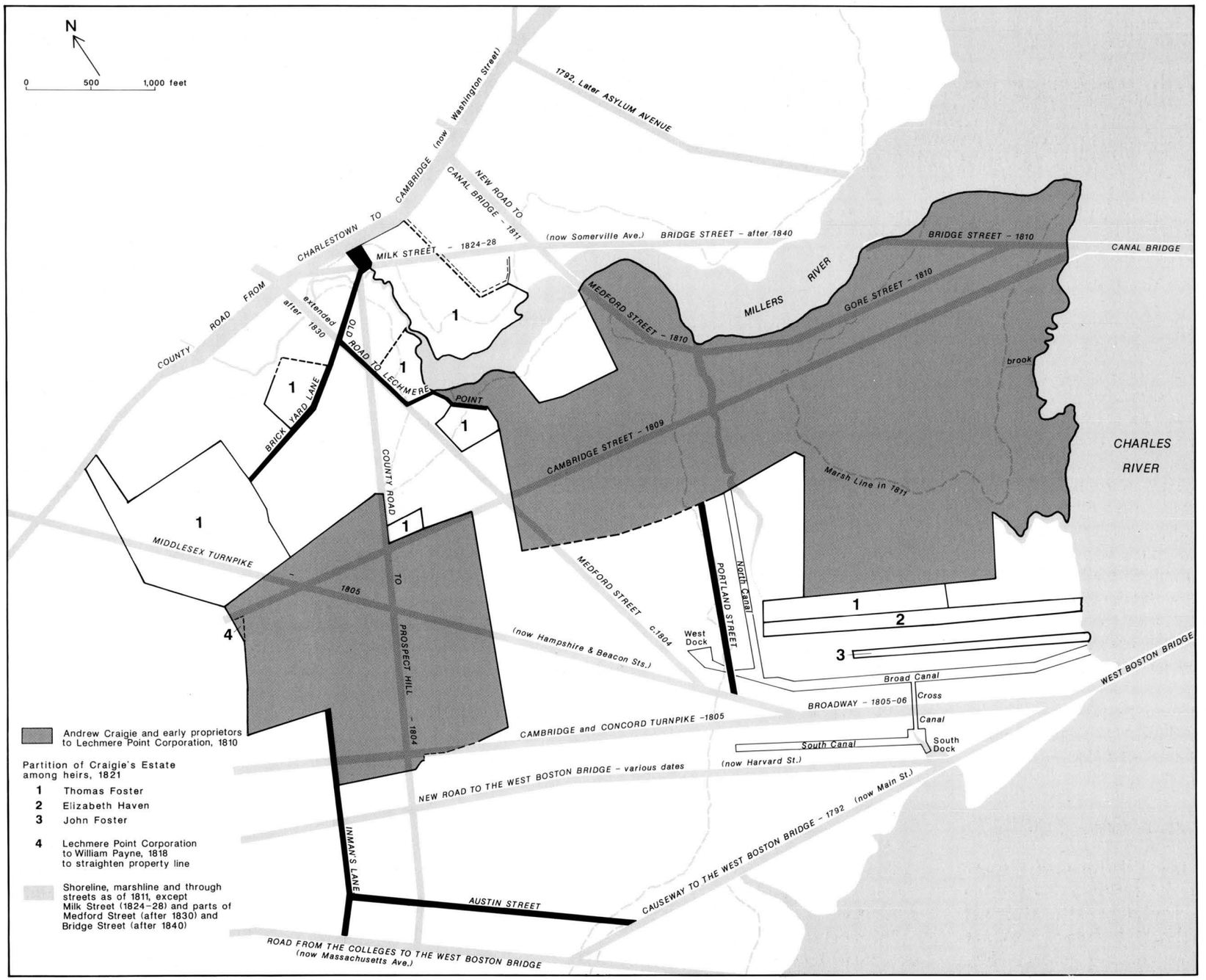
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1792, Later ASYLUM AVENUE
CHARLESTOWN TO CAMBRIDGE (now Washington Street)
NEW ROAD TO CANAL BRIDGE - 1811
(now Somerville Ave.)
BRIDGE STREET - after 1840
BRIDGE STREET - 1810
CANAL BRIDGE
MILK STREET - 1824-28
COUNTY ROAD FROM
extended after 1830
OLD ROAD TO LECHMERE POINT
MEDFORD STREET - 1810
MILLERS RIVER
GORE STREET - 1810
brook
BRICK YARD LANE
CAMBRIDGE STREET - 1809
Marsh Line in 1811
CHARLES RIVER
COUNTY ROAD
MIDDLESEX TURNPIKE
1805
TO PROSPECT HILL - 1804
MEDFORD STREET c.1804
(now Hampshire & Beacon Sts.)
PORTLAND STREET
North Canal
West Dock
Broad Canal
BROADWAY - 1805-06
Cross Canal
South Dock
South Canal
WEST BOSTON BRIDGE
CAMBRIDGE and CONCORD TURNPIKE -1805
(now Harvard St.)
NEW ROAD TO THE WEST BOSTON BRIDGE - various dates
CAUSEWAY TO THE WEST BOSTON BRIDGE - 1792 (now Main St.)
INMAN'S LANE
AUSTIN STREET
ROAD FROM THE COLLEGES TO THE WEST BOSTON BRIDGE (now Massachusetts Ave.)
Andrew Craigie and early proprietors to Lechmere Point Corporation, 1810
Partition of Craigie's Estate among heirs, 1821
1 Thomas Foster
2 Elizabeth Haven
3 John Foster
4 Lechmere Point Corporation to William Payne, 1818 to straighten property line
Shoreline, marshline and through streets as of 1811, except Milk Street (1824-28) and parts of Medford Street (after 1830) and Bridge Street (after 1840)

25. Disposition of Craigie's land, 1810–21

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26. Lechmere Point Corporation seal, 1814, showing the Canal Bridge

modate coastal shipping and Middlesex Canal boats.

A plan of the canals was drawn up by Peter Tufts, Jr., a surveyor who later laid out East Cambridge (Fig. 27). The Broad Canal and the North Canal formed the main links in this system, which included several branch canals and docks in the Lower Port. The concept must have seemed sound: by a network of branch canals, all of East Cambridge and Cambridgeport could be linked through the Middlesex Canal to the commerce of the Merrimack Valley. Before the establishment of Lowell, this commerce consisted entirely of natural products: lumber, cord wood, clapboards, shingles, barrel staves, bricks, and farm produce. However, Cambridgeport lacked any sort of natural power for manufacturing, its marshes required extensive filling, and its wharves were inconvenient because of the tides. Almost all commerce ceased during the Embargo of 1807 and the War of 1812, and the canals never fulfilled the expectations of their promoters. East Cambridge, with better access to Boston Harbor and wharf sites that initially required little filling, was more advantageously located.

The Broad Canal extended more than half a mile parallel to and just north of Broadway to the West Dock between Portland and Bristol streets; this was the head of navigation and was expected to be a commercial center. The North Canal was projected to run from the Broad Canal to the Miller's River along a meandering stream in the marsh between what is now Portland and Fulkerson streets. In 1811, the Lechmere Point Corporation agreed to give Davenport and Makepeace of Cambridgeport the right to extend the North Canal through corporation land to the Miller's River and to allow boats and rafts to pass through. By this agreement, the corporation also gained the right to pass through the canals to reach the Charles River. It remains unclear, however, how much the North Canal was used; on many 19th century maps, it appears simply as a creek running north from the Broad Canal. Although the agreement for building the canals allowed the abutters to use the excavated earth to fill in the adjoining marshes, little work of this nature was undertaken in this period.

When the Lechmere Point Corporation was formed in 1810, there were at most three new houses besides the old Graves' farmhouse in East Cambridge: one was an unfinished house repossessed by the proprietors in 1809, and two were small dwellings created in 1810 from the 1809 blacksmith shop, which apparently did not have much business. The Brooks Tavern at Bridge and Gore streets and Marcy's Hotel at Cambridge and Bridge streets were both in business by 1811 and provided lodging for travelers (see Fig. 29).

Lot sales must have been somewhat haphazard without an official plan, but the corporation sold six lots in 1810 and five in 1811, all north of Cambridge Street and all carrying a restriction that "no building of wood be erected within twenty feet of any street or public highway" (LPC deeds, 1810, 1811). Boston had passed a similar law in 1803, prohibiting the erection of wooden buildings more than ten feet high.

On July 12, 1811, the proprietors met at the "Hotel at Lechmere's Point" and voted to "employ a surveyor and have all the streets laid out and the land divided into lots, within the creek, of such dimensions as they shall think advisable and to place such monuments and landmarks as they shall see fit" (LPC *Records*). The resulting plan by Peter Tufts, dated September 30, 1811 (Fig. 28), was accepted by the proprietors in November when a committee was formed "to report a mode of establishing the public streets and squares conformably to it" (LPC *Records*, Nov. 19, 1811).

Tufts' plan of East Cambridge is a grid, with the main streets running parallel to Cambridge Street and the north-south streets serving as secondary ways. A second grid was laid out north of and parallel to Bridge Street. The blocks were a uniform 200 by 400 feet, with no alleys or service ways dividing them. On the eastern edge of the plan, the blocks were only 295 feet long in order to squeeze in an extra street (Second Street) beside the marsh. The dotted line around the east, south, and west edges of the plan indicated the line between marsh and upland. Laying out named streets, such as South Street, through the impassable marsh and numbering the north-south streets, beginning with Second Street, indicates that the proprietors already planned to fill in the marsh and flats. The laying out of two grids, each aligned with a principal existing street (Cambridge and Bridge), reveals the importance of these arteries in the overall development of the area. The importance of other new streets was revealed by their names: Gore, Otis, and Thorndike, all prestigious investors in the Lechmere Point Corporation. Using these names, well known in Boston financial circles, and omitting Craigie's indicates whose support the proprietors thought would lend the most respectability to their development.

Peter Tufts, Jr., was born in Charlestown in 1774 and served as keeper of its powder magazine. He later moved to Cambridge, became keeper of the powder magazine at Captain's Island in 1818, and executed a map of Cambridgeport Parish in 1824, a year before his death. His background and connections to the East Cambridge shareholders are a mystery. It would have seemed more logical for the corporation to hire Mather Withington, the Dorchester surveyor who laid out Beacon Hill in the 1790s and South Boston in 1804. Since the layout of the streets had been determined as early

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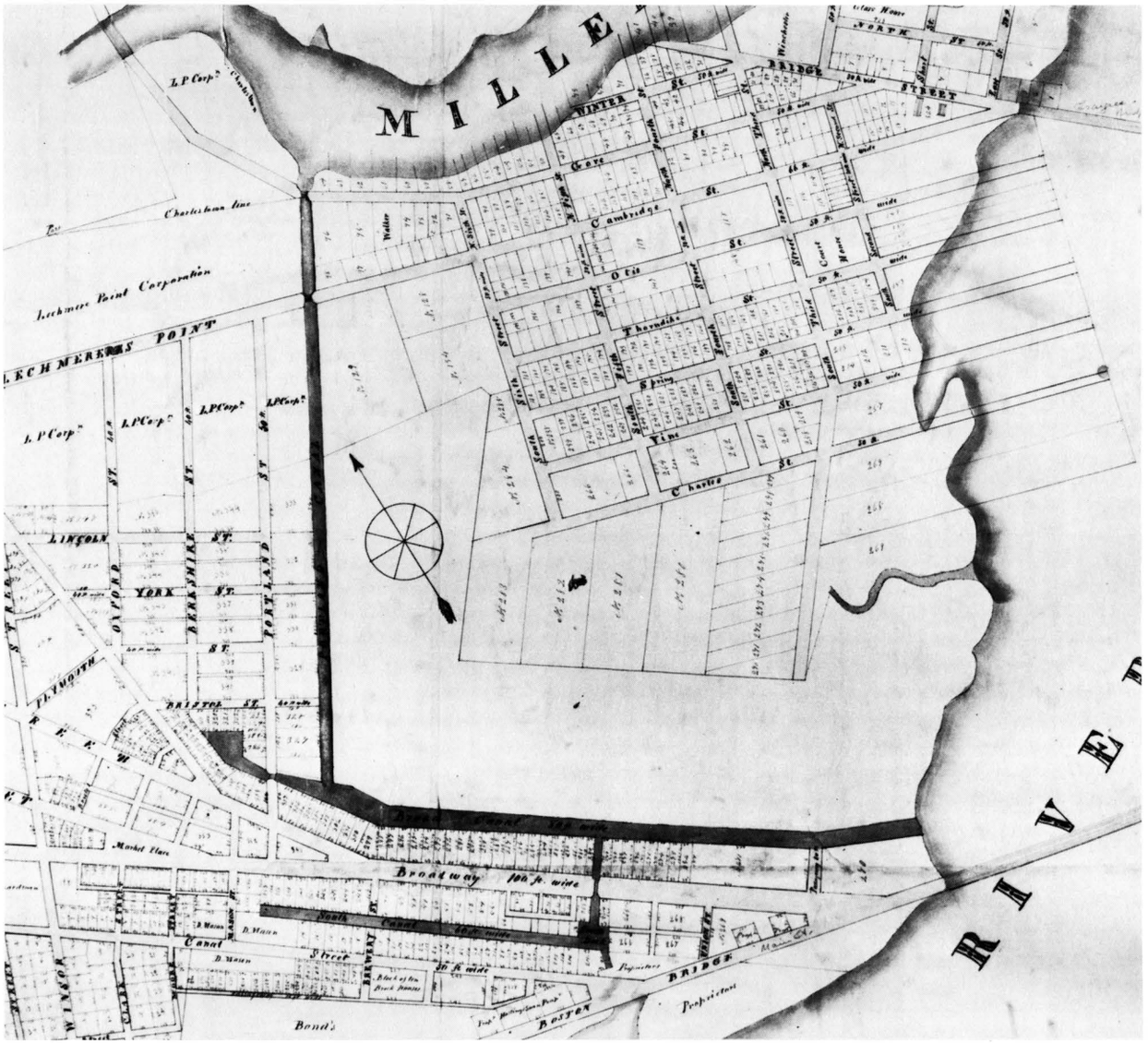
as 1809, however, Tufts may have only put on paper an existing plan.

The Lechmere Point Corporation's aims in laying out East Cambridge and choosing a grid plan were never recorded, but they were most certainly influenced by the success of Beacon Hill and South Boston. The corporation was primarily controlled by Boston investors, chief among them Harrison Gray Otis, to whom Craigie had looked for financial guidance since the 1790s. Otis was also a prime investor in Beacon Hill and South Boston, and he may be considered one of the principal influences on the plan of East Cambridge.

In 1796, Otis and three other Boston investors were incorporated as the Mount Vernon Proprietors; they purchased the 18-acre Copley estate, near the State House on Beacon Hill, and hired Charles Bulfinch to lay out the area. His plan was considered too extravagant, and the owners chose instead a more regular street pattern, designed by Mather Withington. While Beacon Hill was in its first stages of development, some of the proprietors formed other corporations to take down the hill to fill in the millpond behind Causeway Street and to fill in a marsh to create what is now the Endicott Street area. This activity was certainly of interest to Andrew Craigie, whose waterlogged acreage was just across the river.

Even more relevant to East Cambridge's situation was the development of South Boston. Having purchased many acres of undeveloped land on Dorchester Neck, Otis and his associates secured permission to build a bridge to Boston and then had the area annexed in 1804. As with Lechmere's Point, the connection to Boston made the previously isolated land desirable for residential and commercial development. The street plan drawn by Withington and approved in 1805 was similar to the East Cambridge plan; it consisted of two discontinuous grids joined at an angle. As Craigie prepared to build the Canal Bridge, he must have also noted the successful development of South Boston, with its bridge and grid plan.

These prototypical Boston developments, combined with the absence of constraints in the form of existing roads or buildings at Lechmere's Point and the speculator's convention of laying out easily surveyed grids



27. East Cambridge and Cambridgeport canals, 1824

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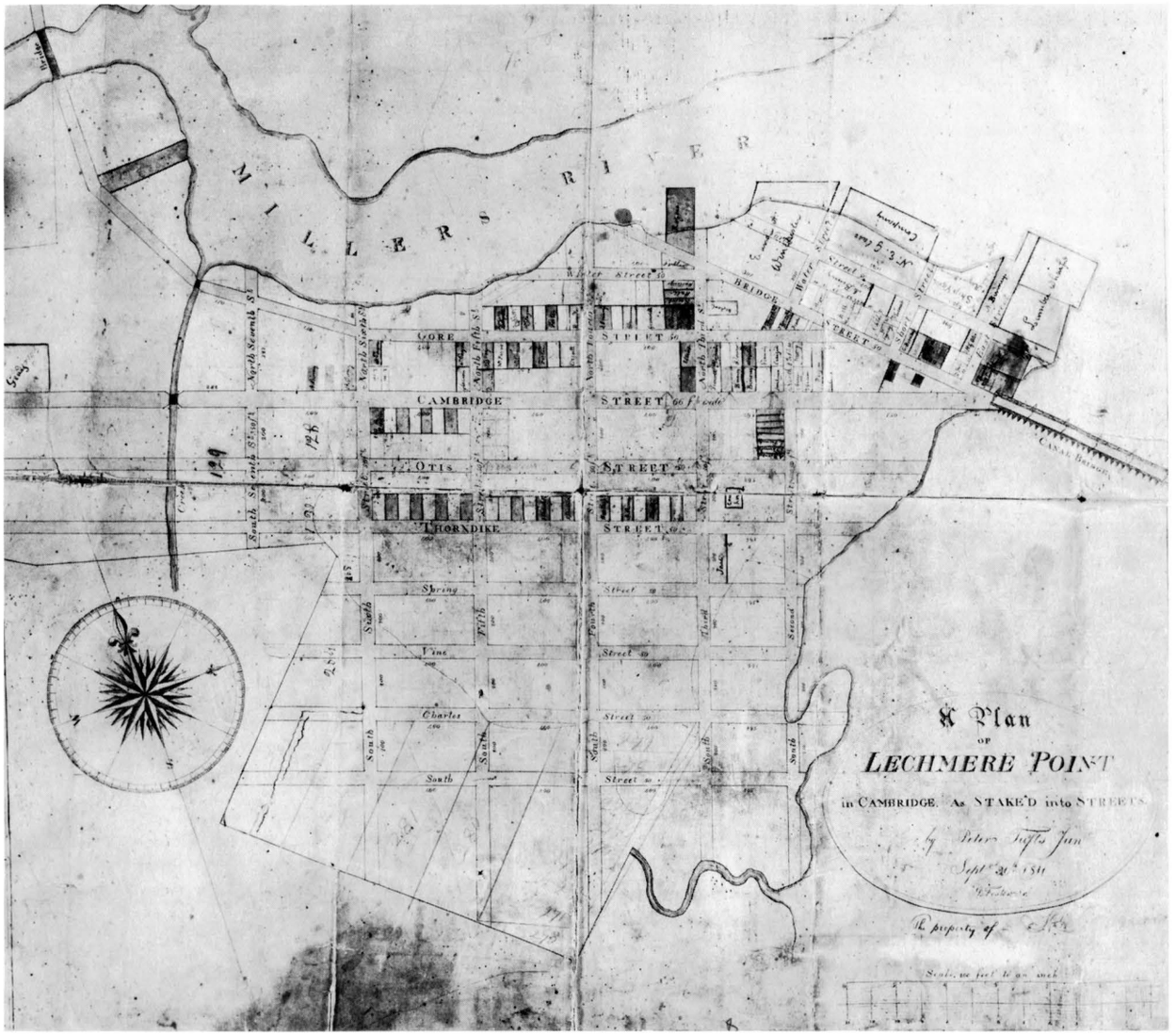
that yielded lots of uniform size and shape, were among the factors that determined the layout of East Cambridge.

Having approved Tufts' plan, the Lechmere Point proprietors had to decide how to proceed with development and what to sell initially. On December 10, 1811, they voted to reduce the summit of the hill on Cambridge Street by 6 feet, making the highest point of land the intersection of Otis and Fourth streets, and to reserve the four blocks abutting this intersection for later development. An early resident of the area reported that during the excavation, "many persons lost their lives by the earth caving in and burying them beneath the embankment" (Simpson, p. 79). Seventy-two lots were to be numbered, appraised, and sold at auction, but only among the proprietors, who could resell the lots or develop them themselves.

By the end of 1811, eighty-two persons lived in East Cambridge. In a petition to the Cambridge selectmen filed on December 30, 1811, nineteen residents asked the town to establish a school at Lechmere's Point for the thirty-eight children who otherwise had to attend school in Cambridgeport, a situation described as "extremely inconvenient and at sometimes utterly impracticable." This plea for public services in East Cambridge was not ignored; the Lechmere Point Corporation voted, on March 28, 1812, to designate a "proper lot" for a schoolhouse, and the selectmen allocated money toward a school.

During these early years of the corporation, Craigie held 800 of the 1,200 shares and continued to serve as president. Land sales were lagging, and the economic turmoil caused by the Embargo of 1807 and the War of 1812 inhibited development. No industries had located in East Cambridge, and Craigie and his associates, looking for a focus to spark the development of their land, began to pursue the possibility of attracting the county seat.

In a farsighted move, the proprietors appointed a committee in 1811 "to devise the best means of attaining the establishment of a Court house for the County of Middlesex with authority to contract with said county for establishing and building such a Court house on the lands of the corporation" (LPC *Records*, Dec. 11,



28. First Lechmere Point Corporation plan of Lechmere Point, 1811, by Peter Tufts, Jr.

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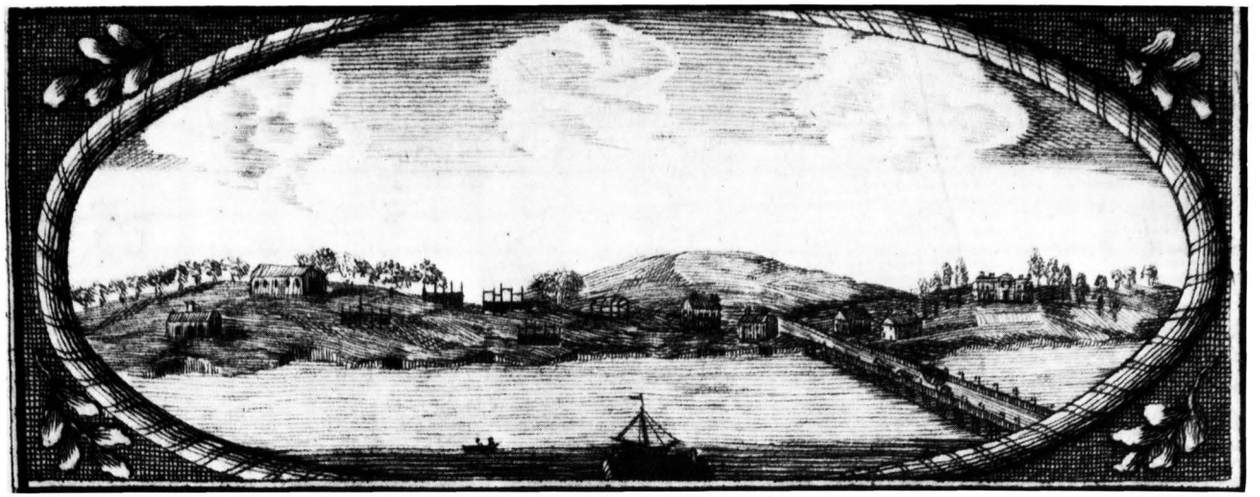

29. View of Lechmere's Point, 1810, showing the Barrell Mansion, right; the Canal Bridge, right foreground; taverns and workshops; frames of five houses under construction; and Thomas Graves' house and barn, left

1811). A site was not mentioned, but the proprietors voted to reserve all the land between Cambridge and Thorndike streets and from Second Street to the river, land that would provide an unobstructed view of the courthouse from Boston.

By 1812, the old courthouse in Harvard Square was so small and in need of repair that the county authorities were considering replacing it. Concord and the outlying towns seized upon this opportunity to have the county offices moved to Concord, which they argued was more centrally located and where a new courthouse and jail had recently been erected. Concord's petition to the General Court resulted in a poll of all the towns in the county to determine their preferred location: twelve towns, with 19,559 inhabitants, voted for Cambridge; thirty-two towns, with 23,233 inhabitants, voted for Concord. Nevertheless, the Court of Sessions decided to remain in Cambridge, although the exact location was not set.

At this point, Craigie and the Lechmere Point Corporation stepped in and, in May 1813, offered to grant land in East Cambridge and lend the county money to construct a new courthouse and jail. Petitions by 31 attorneys, 85 justices of the peace, and the sheriff of Middlesex County supported the move to East Cambridge as more convenient to Boston, where most of them probably lived. The residents of Cambridgeport and Old Cambridge strongly objected to moving the courthouse to what was still a remote section of the town, and they offered land and money to move it to Cambridgeport or keep it in Old Cambridge. These counterpetitions stated that for more than a hundred years the town of Cambridge had been paying one third of the upkeep of the courthouse, and the town felt it should have a say in the new location. In response, the Lechmere Point Corporation offered an outright gift of $24,000 to construct the new facilities. This was enough to sway the county, and on September 21, 1813, the Court of Sessions accepted the corporation's offer and appointed a committee to oversee construction of the new buildings at Lechmere's Point. A complete discussion of the courthouse is presented in Chapter III.

In spite of Craigie's victory, there was continued opposition to the removal of the courts to East Cambridge. When the buildings were ready for occupancy in 1816, James Winthrop, who had served as register of probate for forty-one years, described the inconvenience of moving to East Cambridge, where, he stated:

there are no houses for the accommodation of the families of the Officers and no boarding houses where their assistants can be provided for. As the place does not furnish any assistants from its own population, they must be obtained from other places by paying them for their whole time instead of paying for that portion of the time spent in the service. (Court of Sessions, March 1816)

He pled to be allowed to keep his office in Harvard Square; when denied, he resigned his post, in 1817. Others must also have felt this way about moving to East Cambridge, but Craigie and his associates were understandably ecstatic, and when the courthouse opened they celebrated with a lavish public dinner that was described in the *Columbian Centinel* on November 2, 1816.

On this occasion the Lechmere Point Corporation gave a public dinner at the Lechmere Point Hotel, at whichwere present about seventy persons. Andrew CRAIGIE, President of the Corporation, presided. The Hon. H. G. OTIS acted as Vice-President. The dinner was abundant and excellent – the utmost urbanity prevailed. Among the guests we noticed Judge DAVIS, General VARNUM, Judges DANA and WHETMORE, the Attorney General, Sheriff of Middlesex and deputies, Speaker of the House of Representatives, the Treasurer of the Commonwealth, the Warden of the State Prison, Register of deeds of the county, Hon. Mr. WARD, Wm. TUDOR, Esq., Deacon HILLIARD, CHARLES BULFINCH, Esq., architect of the buildings, and many Counsellors of Middlesex and Suffolk.

The following toasts were drank:

The Palladium of our Freedom — Independent Judges, upright juries, and counsel learned in the law.

The town of Cambridge, the seat of science and agriculture – May it be equally distinguished for commerce and manufacture.

The rising settlement of Lechmere Point – May it add to the importance and resources of the town, *give con-*

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venience and elegance to the establishments of the county, and become a pleasing suburb to the metropolis.

Peace and prosperity to our country – The illumination of science, the extension of arts, and encouragement to laudable enterprise.

The memory and example of John Doe *and* Richard Roe, *of* John Nokes *and* Tom Stiles – *Gentlemen who have long been engaged in litigation without any personal animosity.*

The President and Professors of Harvard University – May that seminary never want distinguished artists to polish its richest gems.

The following volunteers were from several gentlemen of the company: —

The Temple of Justice – on the road to Science.

Our Army and Navy.

CHRISTOPHER GORE, Esq. – the polished civilian, in enviable retirement.

The interesting and happy Point – where town and country meet.

Laws without severity, and lawyers without reproach.

At the time the courthouse offer was accepted, the Lechmere Point Corporation made its first sale of land for industrial purposes. A 120,000-square-foot parcel between North Street and the Miller's River was sold in September 1813 to Jesse Putnam, who became one of the incorporators of the Boston Porcelain & Glass Company, which then located on the site. The low price, a mere $100, must have been the corporation's incentive to attract this business to Lechmere's Point. The company failed after only three years, but it was taken over by what became the area's most successful early industry, the New England Glass Company, thus establishing a substantial industrial complex north of Bridge Street.

With the courthouse assured, the Lechmere Point Corporation made nine land sales in 1813, more than in any previous year, some of which included more than one lot. But the unstable financial climate and stagnant business conditions caused by the War of 1812 forced at least five of these transactions to be voided for nonpayment. The years 1814–16 brought only four recorded sales and no new industries, so the proprietors began to reorganize. In 1814, they decided to run their corporation through a board of directors rather than by general shareholders' meetings, and they arranged with the Canal Bridge Corporation to assume all the shares in the Prison Point Dam Corporation. In 1814, four years after its inception, the Lechmere Point Corporation was listed on the Cambridge tax rolls as owning five houses, one store, one tavern, two boardinghouses, and 250 acres of land.

When the courthouse opened in 1816, the proprietors sought to stimulate sales by liberalizing the building restrictions, allowing wood, brick, or stone at the owner's option provided that "no wooden building except dwelling houses at least two stories in height shall be built within 30 feet of any street without special license" and that no wooden building more than 10 feet high could be used for any kind of manufacturing that used fire (LPC deeds). They also advertised the advantageous location of Lechmere's Point and the availability of toll-free passage and easy financing.

NOTICE
Lechmere Point Lots

The attention of all persons who are desireous of building, is now respectfully invited to the LANDS belonging to the Lechmere Point Corporation, *which are now offered for sale. — This Land is situated on the Charles river, and is united to the towns of Boston and Charlestown, by two commodious bridges. The distance from the Court-House at Lechmere Point, to the old State-House, in Boston, does not much exceed one mile. Wide and commodious streets have been laid out in every direction. The lots are divided into different dimensions, and adapted for houses, stores, and buildings of every description. Cellars and wells of excellent water, are made with the greatest possible ease, solid foundations for building and good springs of water being found at a moderate depth.*

All the materials for building may be brought by water carriage, to the landing near the sites of the house lots. The great roads leading through this tract, are equally near with any others to the middle, western, and northerly parts of the state, and are pleasanter and in better condition than any of them.

Wood, and provisions of all sorts, in great abundance, pass constantly through the principal streets, and the public buildings of the county are there located.

By a late regulation, all persons inhabiting any house built on the tract within five years, will be entitled to pass the bridge, free of toll for themselves and their families, their horses and carriages. *And the purchasers of lots first sold will have a long credit, upon paying a small part of the purchase money down, and the interest punctually.*

An opportunity is thus offered to persons to build, to obtain lots suitable for buildings of all descriptions, and possessing all the advantages of land situated within the limits of Boston, at prices much less than they must pay for lots actually within these limits — and they will not be under the restrictions of the town, but may build with wood. It must be obvious, that those who invest their money in estates thus situated, will invest it to the greatest advantage, as property at this place must rapidly increase in value, with the increasing growth and prosperity of the capital of which it will be in fact a part, in everything but the name, and which at this moment affords most of the advantages to be found in the town; and some which the town does not possess. To all persons whose professional duties are performed at stated and regular hours, to those who have the privilege of commanding their own time; to such as are desireous of making extensive manufacturing, or mechanical establishments, are offered the advantages of most delightful, healthy, and airy situations, with room sufficient for their conveniences, accessible by land or water, within a few minutes walk of the center of the capital, and destined to become a flourishing and prosperous suburb.

Persons disposed to purchase, may apply to the Treasurer of the Corporation. H. G. OTIS, Jun. at his office, Court-square–or to Mr. PAYNE, State-street.

Columbian Centinel, June 26, 1816

The toll-free incentive was not particularly successful, and the proprietors found it difficult to control. In

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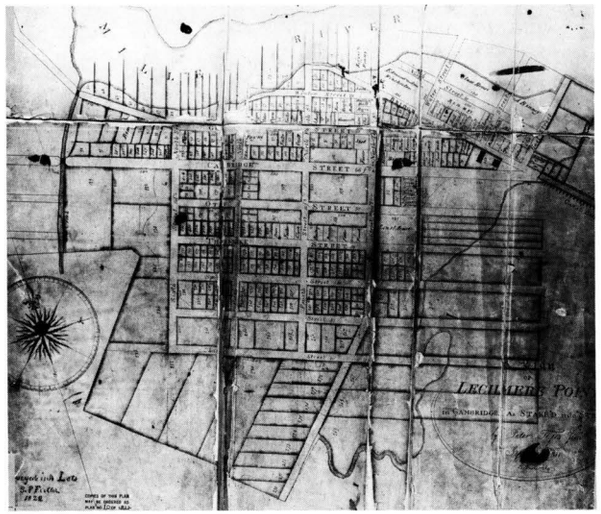

30. Lechmere Point, 1822, with the street grid extended into the marshes and surveyed into lots by S. P. Fuller

1818, they decided against offering toll-free rights to future settlers. At the same time, they voted to rent some of their recently built houses to officers of the court, suggesting that the housing shortages Winthrop had complained about in 1816 were still a problem.

At this time, the Lechmere Point Corporation was not doing well. The bridge had not been as profitable as it had expected. In its first ten years, the Canal Bridge Corporation had been forced to pay a bounty of $11,176.66 to vessels using the draw. Traffic had varied greatly, from a low of 51 boats during the War of 1812 to a high of 721 in 1818, so that in some years the financial burden was great.

In addition, East Cambridge was not developing into the thriving adjunct to Boston that Craigie had envisioned, and Craigie himself was suffering severe financial difficulties. During his last years he was virtually imprisoned in his house on Brattle Street as he attempted to avoid process servers, creditors, and lawyers. Only on Sundays could he venture out safely to attend Christ Church. Craigie died on September 19, 1819, and a dreary, sparsely attended funeral marked his passing. His death was not even mentioned in the minutes of the Lechmere Point Corporation.

Ironically, sales began to pick up somewhat in 1819: a second industry, a soap factory, was built next to the glassworks, and Amos Binney, a merchant and U.S. Navy agent in Boston, became a director of the corporation and began buying land, particularly along North Street, where he built rows of workers' housing. But the corporation seemed discouraged and in 1820, two years before its charter would expire, began devising methods of disposing of its property. All its land was appraised and auctions were held in 1821. The proceeds of $60,000 were to be divided among the proprietors at the rate of $50 per share, but shareholders were encouraged to take property in lieu of a cash dividend. The largest shareholders at this date were Amos Binney, 150 shares; William Payne, 229; and Christopher Gore, 92. Craigie's estate, in contrast, held only 28 shares.

In 1822, the Lechmere Point Corporation hired S. P. Fuller to survey its land and to extend the 1811 Tufts plan to include more lots, particularly in the flats (Fig. 30). A schedule of unsold lands belonging to the corporation was published, listing 324 lots to be sold at a public auction on September 18, 1822, at the Lechmere Point Hotel (Fig. 31). Even the hotel was for sale, having been leased out since its construction. All remaining land was to be turned over to the Canal Bridge Corporation. Having auctioned its land and declared a final dividend of $73.23⅔ per share, the Lechmere Point Corporation quietly closed its books.

The Canal Bridge Corporation, 1807–46

The Canal Bridge Corporation, which had been responsible since its formation in 1807 for managing the Canal Bridge, became actively involved in Lechmere Point real estate in 1822. An 1822 amendment to the Lechmere Point Corporation's charter granted a six-month extension to the life of that corporation and gave the proprietors two options for disposing of unsold real estate: distribute it among the various proprietors or sell it to the Canal Bridge Corporation. The amendment limited to 10 acres the amount of land that could be transferred to the Canal Bridge, but that figure does not appear to have been respected.

On October 21, 1822, the Lechmere Point Corporation turned over to the Proprietors of the Canal Bridge Corporation two entire blocks between Otis, Cambridge, Third, and Fifth streets, the hay scales lot at the junction of Gore and Bridge streets, the flats between Otis and Thorndike streets east of the courthouse, and "all flats and other land belonging or appertaining to the Lechmere Point Corporation which have not been granted or conveyed or contracted to be granted." The two corporations were already closely connected, both having been established by Andrew Craigie. The president of the Canal Bridge Corporation in 1822, William Payne, had long been active in the Lechmere Point Corporation, which owned shares in the bridge. Others also held shares in both corporations. The deed conveying the property states a price of only $10, and that there were other considerations or that any of the money collected from land sales was to revert to the Lechmere Point Corporation or its proprietors is not revealed.

In spite of their connections, the transition was not as smooth as the residents of Lechmere's Point might have expected. After the dissolution of the Lechmere Point Corporation, the Canal Bridge Corporation did not wish to continue toll-free passage for residents and began collecting tolls from all who used the bridge. In 1823, forty-three residents and major landowners protested this action, but they were not able to change the decision. This burdened both new and old residents until 1858, when the bridge became toll-free. In 1823, the population of East Cambridge was reported to be close to 1,000, and tolls on the bridge averaged $200 to $300 per week.

In 1823, the Canal Bridge Corporation began selling its recently acquired property and promoting development. Sarah Brooks, the widow of one of Lechmere Point's earliest residents and businessmen Calvin Brooks, purchased the triangular hay scales lot just east of the Brooks Tavern which the Lechmere Point

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SCHEDULE

OF

UNSOLD LANDS,

BELONGING TO THE

LECHMERE POINT CORPORATION.

SURVEYED MAY 25, 1822, BY S. P. FULLER.

13

No.	Species of Property.	How Fronting.	Front.	Depth in Feet.	Remarks.
314	Lot north side Concord-street, next west No. 313	Concord-street	160	500	Contain'g 1 acre 3 qrs. $13\frac{7}{16}$ rds. [leased 3 years
315	Do do do next west No. 314	do	160	500	do 1 A. 3 Q. $13\frac{7}{16}$ R. do
316	Do do do east side county road	do	160	500	do 1 3 $13\frac{7}{16}$ do
317	Do do do west side county road	do	150	500	do 1 2 $35\frac{7}{16}$ leased 1 year
318	Do do do next west No. 317	do	150	500	do 1 2 $35\frac{7}{16}$ do
319	Do do do next west No. 318	do	150	500	do 1 2 $35\frac{7}{16}$ do
320	Do do do next west No. 319	do	107 front 111 rear.	500	do 1 1 $2\frac{4}{16}$ do
321	Lot south side Concord-st. east corner Inman's [lane	do	270 front 271 rear.	176 west line 149 east line	do 1 0 1 leased 3 years
322	Do do do next east No. 321	do	277 front 278 rear.	149 west line 122 east line	do 0 3 $17\frac{3}{4}$ do
323	Lot uninclosed near Burial Ground	do	136		do 31
324	Hotel and out buildings, fronting Bridge	on Bridge	$94\frac{6}{12}$ front 180 rear.	190 on Bridge-st. $203\frac{9}{12}$ on Camb. st.	Containing 26,075 square feet, [leased 5 years at $600 per ann.

☞ **Sale to be on WEDNESDAY, the 18th day of September, at the Hotel, at *Lechmere Point*, commencing at 9 o'clock, A. M. and to be continued from time to time, until all the lots are sold.**

31. Schedule of unsold lands, Lechmere Point Corporation, 1822

TO BE SOLD AT PUBLIC AUCTION,

BY THE PROPRIETORS OF THE CANAL BRIDGE,

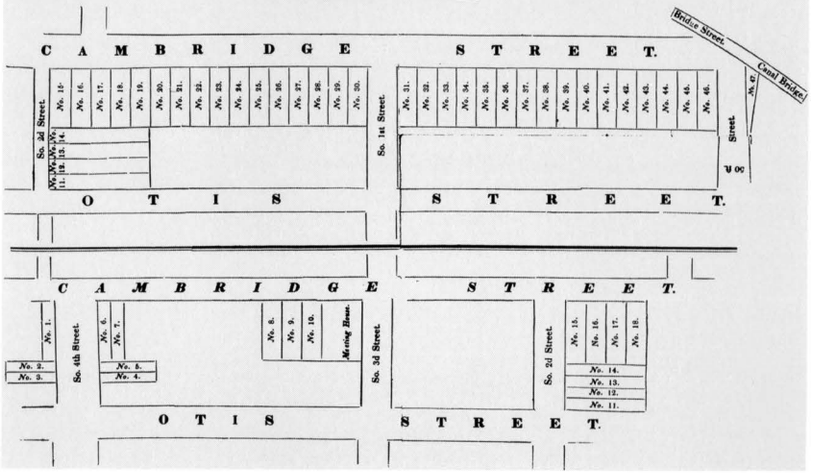
On Wednesday the 7th day of June next, 10 *o'clock, A. M. at Hastings' Tavern, Lechmere Point, near the Bridge,*

FORTY FIVE LOTS OF LAND,

Situated on Cambridge, South Second, and South Fourth Streets.

CONDITIONS OF SALE—20 per cent. cash on the offer of the deed to the purchaser—20 per cent. on or before the 7th day of June, 1827,—20 per cent. on or before the 7th day of June, 1828—20 per cent. on or before the 7th day of June, 1829—20 per cent. on or before the 7th day of June, 1830, with interest, annually, till paid, to be secured by mortgage on the land sold. The purchaser of a lot, to have the privilege of taking the adjoining lot at the same price.

STEPHEN BROWN, *Auctioneer.*


Bridge Street.
Canal Bridge.
C A M B R I D G E S T R E E T.
So. 3d Street.
So. 1st Street.
O T I S
S T R E E T.
C A M B R I D G E
S T R E E T.
So. 4th Street.
So. 3d Street.
So. 2d Street.
Mining House.
O T I S
S T R E E T.

32. Auction notice, Proprietors of the Canal Bridge, June 7, 1826

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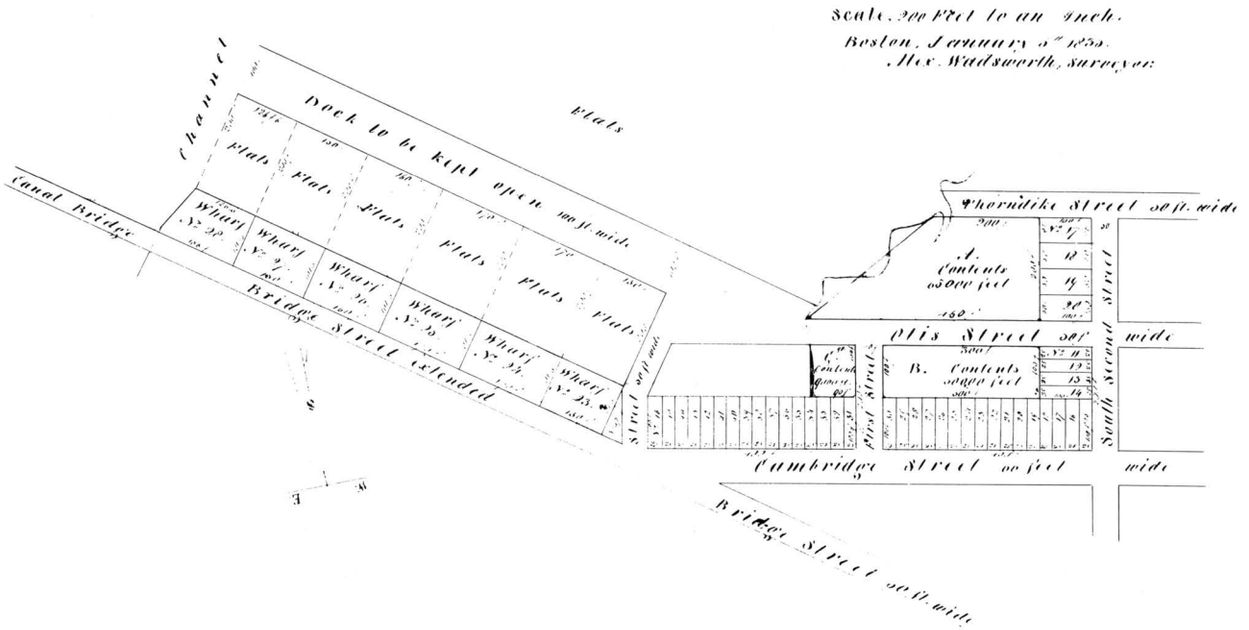
proprietors had erected in 1809. The corporation also donated part of a lot on Third Street to the trustees of the Methodist church with the condition that they build a church by November 1824 and a schoolhouse and "suitable dwelling house for the clergyman" by November 1825. In 1824, Amos Binney bought a lot on the tide flats near his industrial land north of North Street. No other early land sales are recorded. Instead, the corporation decided to sell its property by public auction.

Figure 32 reproduces the Canal Bridge proprietors' advertisement for its June 7, 1826, auction of 45 lots, 37 of which were on Cambridge Street east of Second Street. The Cambridge Street lots were uniformly narrow at 25 by 100 feet, but many were purchased together to make larger parcels, especially by such seasoned Lechmere Point entrepreneurs as Amos Binney, Edmund Munroe, Ebenezer Francis, and John Callender. Of the Cambridge Street lots, only 8 were sold to Lechmere Point residents, whereas 23 were sold to Boston merchants connected with the Lechmere Point Corporation, most of whom already owned land in East Cambridge. Some 5 lots were sold to tailors, 2 to laborers, and 1 to a mason, presumably for their own use, but the others were bought for speculation. The total for all lots sold was almost $16,000, an average price of $350 per lot.

The Canal Bridge Corporation was also busy creating new lots by filling in land beside the bridge to make wharves and attract industrial enterprises that needed large amounts of land and ready access to water transportation. In 1826, a new wharf was created and a bulkhead constructed at considerable expense. After selling land on the north side of the bridgehead to the Boston & Lowell Railroad in 1832 and allowing it to fill in the west 100 feet of the bridge and build a 200-foot wharf, the corporation created new water frontage by filling in land for wharves on the south side of the bridge (Fig. 33). Filling operations were expensive, and the corporation paid more than $12,000 to fill an area of approximately 400,000 square feet. Earlier filling operations had used earth from the top of Putnam Hill, but by this period development in East Cambridge had progressed sufficiently to make this impractical. The railroad, however, soon had fill available from cuttings along the line in Charlestown and Medford and used it to make land for a terminal. The new wharves were successfully sold at auction in October 1834 for a total of $18,000, $6,000 more than the filling costs. Five of the six new wharf lots were sold to Boston merchants. In selling these lots, the Canal Bridge Corporation reserved an 8-foot strip along Bridge Street and required the purchaser to construct a permanent sidewalk at least 6 feet wide that would become part of the public highway.



33. Wharves and lots on the south side of the Canal Bridge, 1835

At the same auction, twenty residential lots along Cambridge and Otis streets were also sold. These lots were in the two blocks between Third and Fourth streets, blocks that the Lechmere Point Corporation had reserved since 1811.

In the late 1830s and 1840s the corporation seemed to be liquidating its holdings, perhaps in response to repeated offers to purchase the bridge and make it toll-free. The 1840s brought numerous sales of watery terrain along the Miller's River to companies that already owned property there, among them Winchester's soap factory and the New England Glass Company. These sales extended the purchasers' rights into the tide flats to the low water mark but required extensive filling to be useful.

In 1828, the General Court raised the possibility of a new company's purchasing both the West Boston and Canal bridges and making them toll-free. An attempt to carry out this plan in 1836 came to nothing, but in March 1846 a group of Cambridge residents, mostly Cambridgeport men, obtained a charter creating the Hancock Free Bridge Corporation. They intended to build a third bridge between the two existing bridges or to purchase the two existing bridges if the proprietors would sell. The new bridge was never built; within

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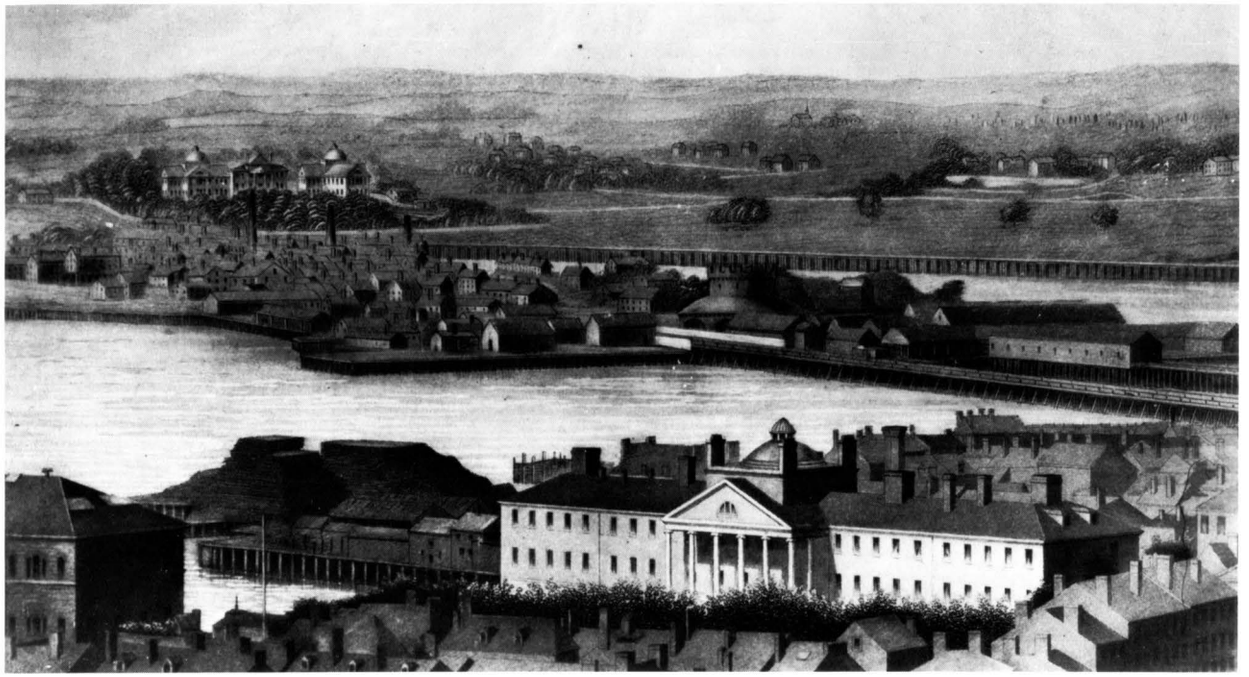

34. Massachusetts General Hospital, Craigie's Bridge, East Cambridge, and the McLean Asylum, c. 1846–51

35. Former toll house on Craigie's Bridge in 1899

a few months the Canal Bridge Corporation had voted to sell its bridge for $60,000. The purchase was completed on July 1, 1846 (Fig. 34).

The Canal Bridge did not become free for another twelve years, as the new corporation's charter allowed it to collect tolls until the purchase price and a maintenance fund of $150,000 had been collected (Fig. 35). Under the new management, the bridge was thoroughly repaired in 1852, when a large part of the superstructure was renewed and the gravel paving was replaced with cobblestones. On January 30, 1858, the two bridges were turned over to the city, and a great celebration marked their becoming "free public avenues forever." In 1870, the General Court passed an act transferring the maintenance of the Canal and West Boston bridges to two commissioners from Cambridge and Boston, with expenses shared equally by the two cities. The Canal Bridge served until 1905, when it was replaced by the Charles River Dam in the same location.

With the sale of the bridge and most of its land, the Canal Bridge Corporation's duties were coming to an end. On July 1, 1846, the day of the bridge sale, the Proprietors of the Canal Bridge conveyed to Levi Marsh of Boston 18 acres of flats on the south side of the bridge, near the bridgehead, to be held in trust for the proprietors and to be sold for their benefit; this he did on September 14, 1846, for $7,300. This was described in the deeds as being "the only remaining lot belonging to said proprietors remaining unsold." The last recorded transaction was the sale of an open dock, 100 feet wide, along the south edge of the bridge wharf lots, an area that later became the north leg of the Lechmere Canal. The business of the corporation was now completed. In the second half of the 19th century, land in East Cambridge would be developed by a series of new corporations (Fig. 36).

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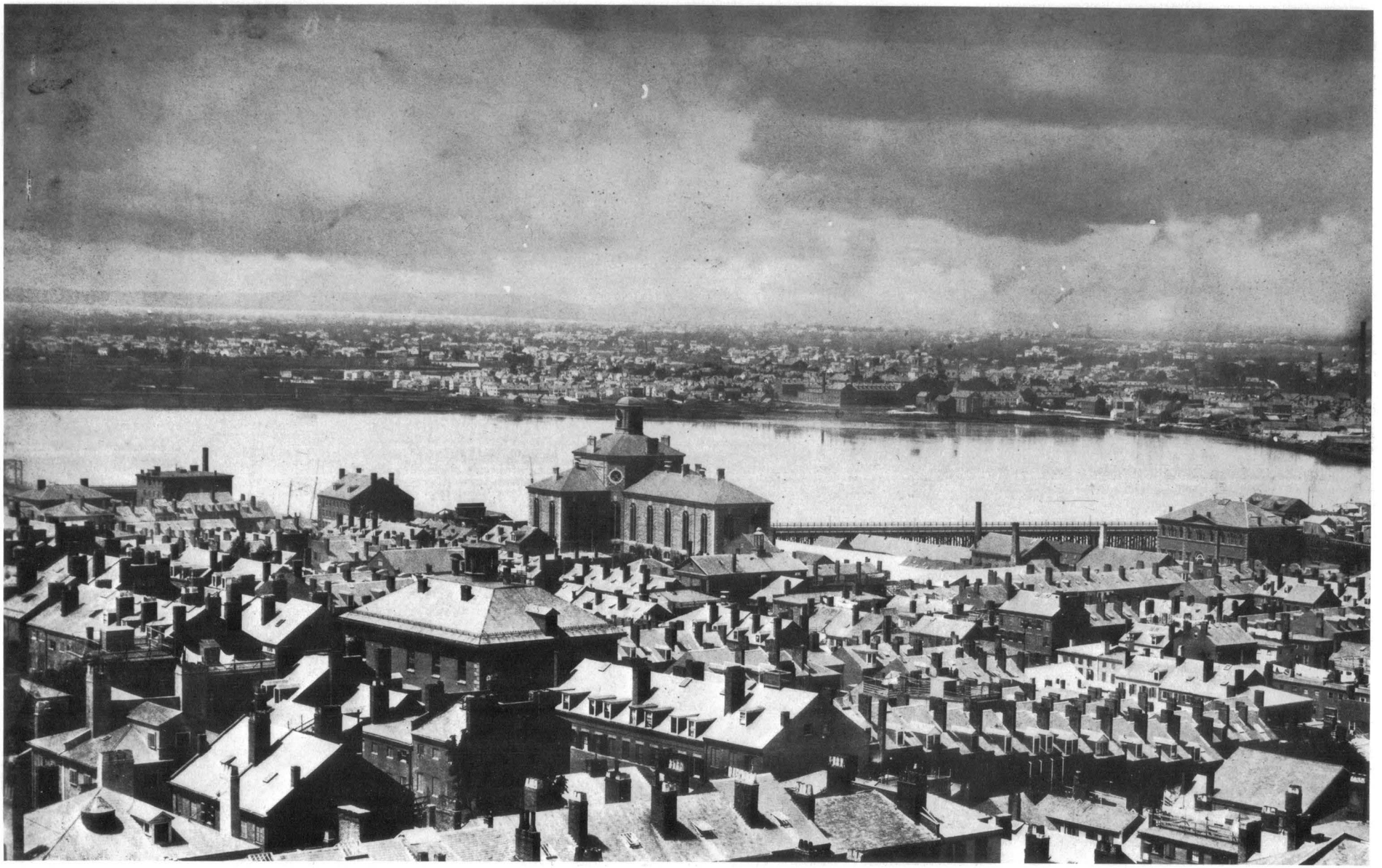

36. East Cambridge from the State House, c. 1851–69

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37. East Cambridge east of Fifth Street, aerial view, c. 1925

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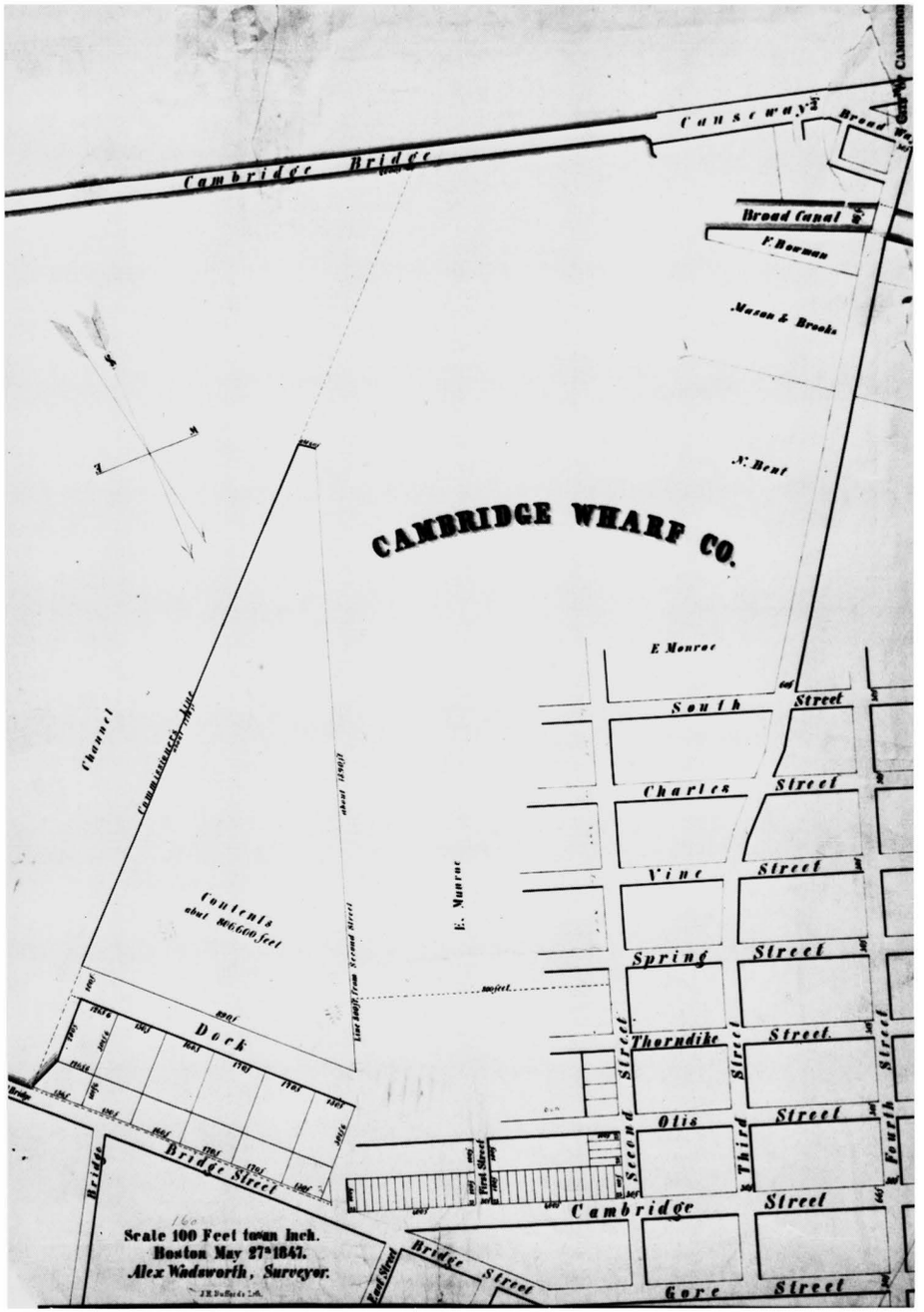
Filling the Marshes and Rivers for Development

South of Cambridge Street, 1846–1961

The creation of new land south of Cambridge Street largely took place east of Second Street and below Charles Street. It involved a number of false starts, corporate failures, and setbacks, for the economics of converting mud flats and marshland into usable property proved complicated and costly (Fig. 37).

In 1846, the Canal Bridge Corporation conveyed some 18 acres of flats on the south side of the Craigie Bridge to Ezekiel Bates, Caleb Pratt, and John Monks in trust for seventeen others, most of whom were from Boston. This group intended to enclose all or part of this land by a seawall. In 1847, Pratt, Monks, and Asa Swallow were incorporated as the Cambridge Wharf Company, which was authorized to buy and develop land in East Cambridge between the West Boston and Craigie bridges (Fig. 38). At the same time, William Easton, the first president of the company, appointed a committee to ascertain if a "passageway" could be obtained from the bridges to the company's property. Without this passageway, the plans for a seawall and wharves were stymied.

In June 1873, after twenty-five years of inaction, the Cambridge Wharf Company sold the entire premises to Fred Pope, who mortgaged it back to the company. A complicated series of transactions put some of the property in the hands of James Woodbury and Solomon Woods, who were partners in the Cambridge Improvement Company. But in 1876 both Pope and the Improvement Company defaulted on taxes, and the par-



38. Cambridge Wharf Company land, 1847

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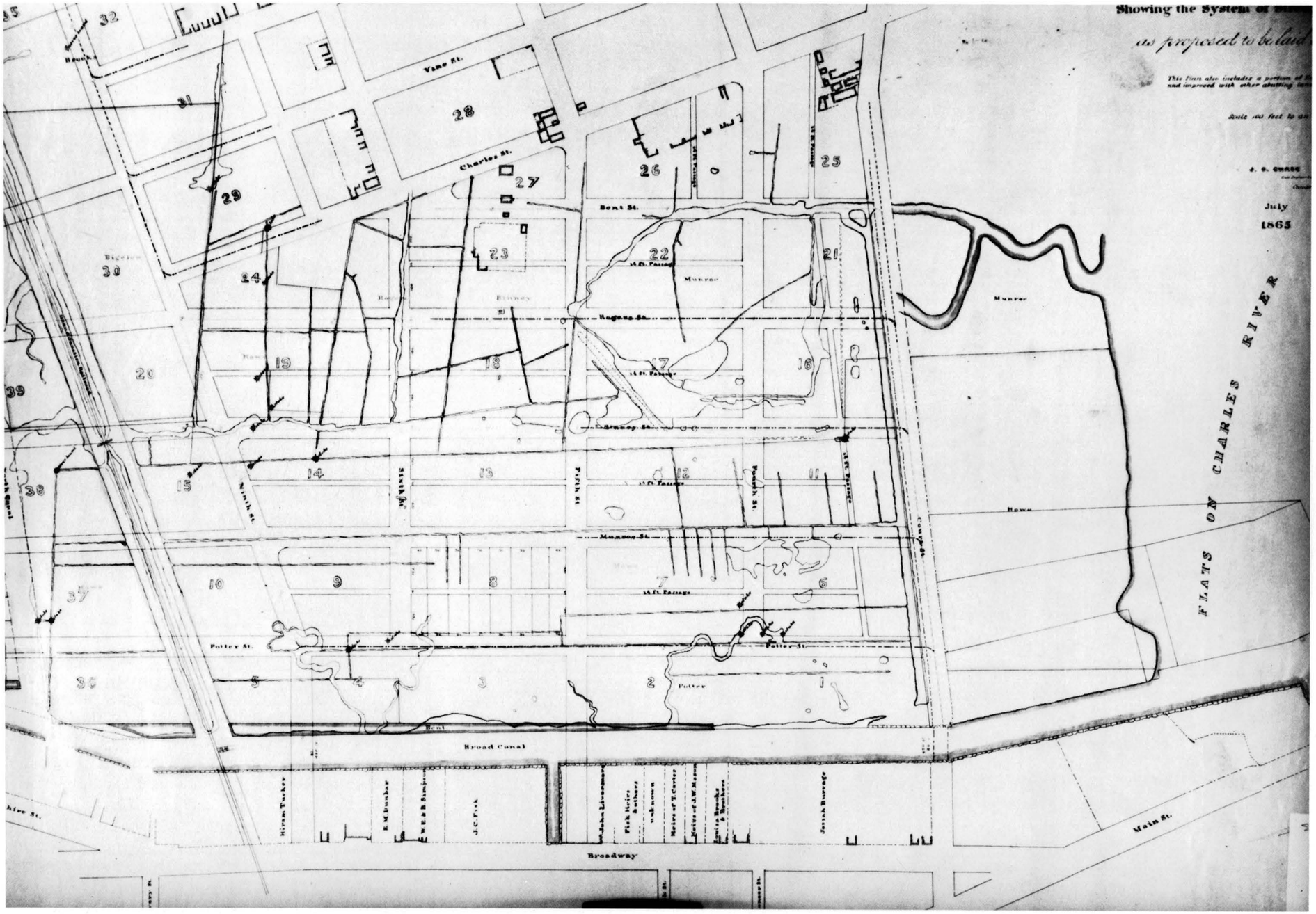

39. East Cambridge Land Company plan, 1865

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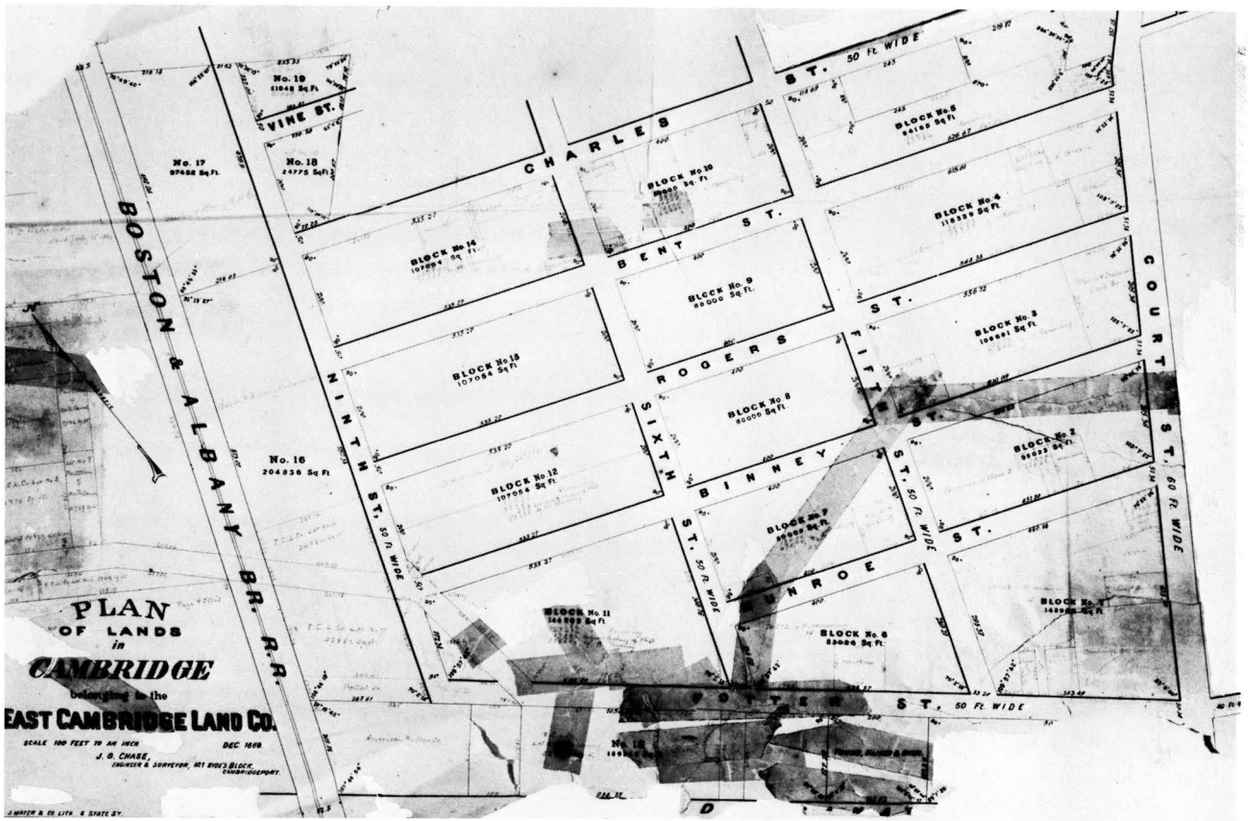
cels reverted to the inactive Wharf Company. Finally, in 1890, the property was sold to Frederic H. Viaux, but nothing much was done until plans for the entire Cambridge waterfront were developed later in the decade.

In the meantime another development group, the East Cambridge Land Company, had been incorporated in 1861 with broad powers to buy land in most of East Cambridge below Cambridge Street. The company's holdings, however, were primarily marshland south of Charles Street. Between 1860 and 1869, one of the incorporators of the company, Estes Howe, assumed mortgages worth $17,200 on lots that he then turned over to the company. The first known development plan for this area was dated 1865; it proposed a new grid system south of Charles Street, with streets running perpendicular to Third Street and thus at an angle to Charles Street (Fig. 39). Whereas the Cambridge Wharf and the Cambridge Improvement companies had to deal with filling mud flats visible only at low tide, the East Cambridge Land Company's property was salt marsh and should have been easier to develop. However, the map shows that even this marshland was waterlogged and difficult of access, for it was riddled with ditches and pools of standing water. Its development did not go smoothly or rapidly.

In 1869, the company increased its holdings by purchasing a piece of the Munroe property, on the west side of Third Street, and developed a new layout to conform to the existing street grid. The company's entire property, about 75 acres, was surveyed and offered for sale in the orderly numbered blocks and streets seen on J. G. Chase's 1869 map, but the water problems were still substantial (Fig. 40). By 1890, the company had sold only 60 percent of its holdings and its charter had to be extended twice, but it still fared considerably better than either the Cambridge Wharf or the Cambridge Improvement Company. The East Cambridge Land Company eventually attracted a number of industries, mostly expanding Boston firms looking for reasonably priced large lots of open land away from residential areas. Many were heavy industries, including the Boston Bridge Works, the George F. Blake Manufacturing Company, and Alden Speare's



40. East Cambridge Land Company survey, 1869, J. G. Chase

Sons; they relied on the railroad access provided by the Rogers Street track, which opened in 1876. This former marshy area south of Bent Street and west of Third Street now acts as a buffer between the residential area to the north and the recent commercial development south of Binney Street.

The improvement of the land east of Third Street between Main and Cambridge streets had an equally rocky history and included the creation of the Lechmere Canal. The 1865 map shows Munroe and Howe as owners of this land, but in March 1874, the Cambridge Improvement Company (including Woodbury, Woods, and Sereno Nickerson) was formed to deal with this largely underwater area. Woodbury had taken title to all of Munroe's estate east of Third Street in 1872, to Howe's property east of Third Street in 1873, and to part of the Cambridge Wharf Company land in 1873. He and Woods turned over all this land to the Improvement Company in the spring of 1874 (Fig. 41).

In July, the Board of Harbor Commissioners granted a license to Woodbury, Woods, and Fred Pope (who by now possessed all the Cambridge Wharf Company's land) to improve the commercial frontage on the Cambridge side of the Charles River. At the same time, the board required them to improve the channels of the Charles River between the Craigie and Brookline bridges as compensation for tidewater displaced.

In October 1874, the Cambridge Improvement Com-

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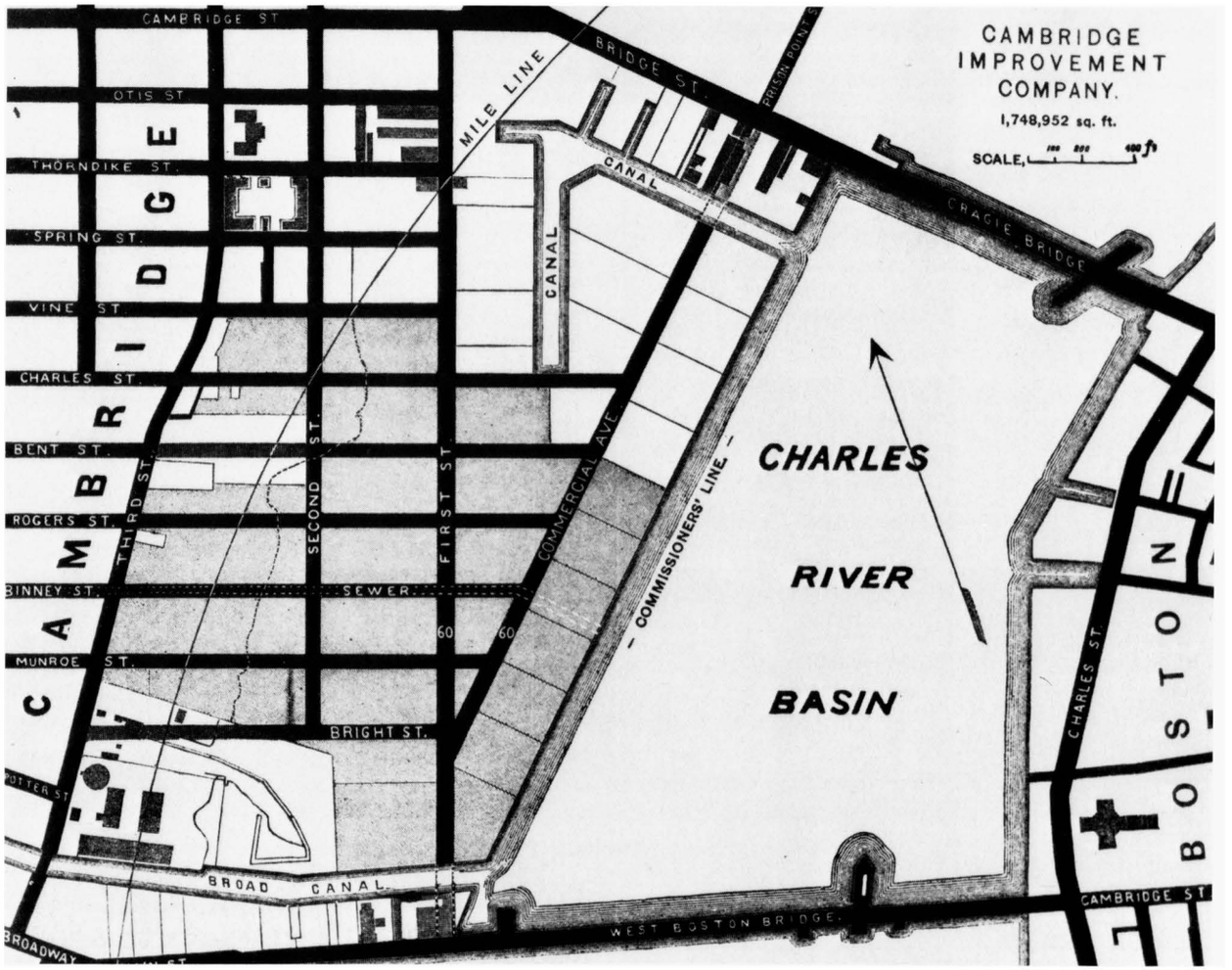
pany began work on the south branch of the Lechmere Canal, 120 feet wide and 900 feet long. By the close of the season, 600 feet of wooden bulkhead along the west side of the canal had been completed. In April 1875, the company let contracts for dredging the canal, deepening it to 3 or 4 feet below mean low water; the material removed from the canal was deposited behind the bulkhead. At the same time, dredging began on the main channel of the basin and work began on the foundation for the seawall, 500 feet of which was completed. In September, the seawall itself was begun. In 1875, the American Net & Twine Company erected the first building on filled land sold by the Cambridge Improvement Company. The building's 1982 renovation into modern office space was one of the first in a new wave of similar developments in this area.

In 1874, the Improvement Company also secured an extension of First Street to Main Street against the opposition of wharf owners, who would lose valuable river frontage. But the company's victory was short-lived. After the Panic of 1873, the city, already burdened by the cost of building the Binney Street sewer, decided that the cost of extending First Street should be borne by the speculators. When the work was completed in 1877, the Improvement Company suspended operations to await more favorable economic times. Its layout of streets east of Third Street, however, remained as planned.

Through the 1880s and 1890s, individuals continued to fill in the flats. First Street was completed by 1892, and filling was begun on both sides of the street between the Broad Canal and Binney Street.

In 1892, the thrust of development in this area changed when the Cambridge Park Commissioners (Henry Yerxa, Jonathan O'Brien, and George Howland Cox) employed the firm of Olmsted, Olmsted & Eliot to design a park system for the city. Their preliminary report, dated December 9, 1893, proposed reserving the whole Cambridge riverbank for a park and described a 1,500-foot-long river front park in East Cambridge between Binney Street and the Lechmere Canal, which they called "The Front" (Fig. 42). The landscape architects also envisioned a dam upstream from the Craigie Bridge to connect with Charlesbank park on the Boston side of the river. The Front was



41. Cambridge Improvement Company land (shaded), 1875

intended to preserve the view of the river basin while providing boating facilities, a beach, and a place for children's games. In addition, they urged that Commercial Avenue be finished to the Prison Point Bridge.

Olmsted, Olmsted & Eliot's preliminary plan for the Front, published in 1894, showed a curved beach on the southern half, with a boathouse and landing at the southern corner (Fig. 43). The northern portion was to contain an open gravel playground accessible from Charles Street and a public convenience and park service building concealed by shrubbery. This plan was never carried out; the proposal to build a dam was defeated in 1894, and the architects felt the water was too polluted for a beach.

In 1895, the City of Cambridge assumed the responsibility for filling the remaining flats. The harbor commissioners granted the city a license to build a seawall and fill the space between Binney Street and the Lechmere Canal along the commissioners' line (Fig. 44). The seawall was constructed by 1895 when filling the

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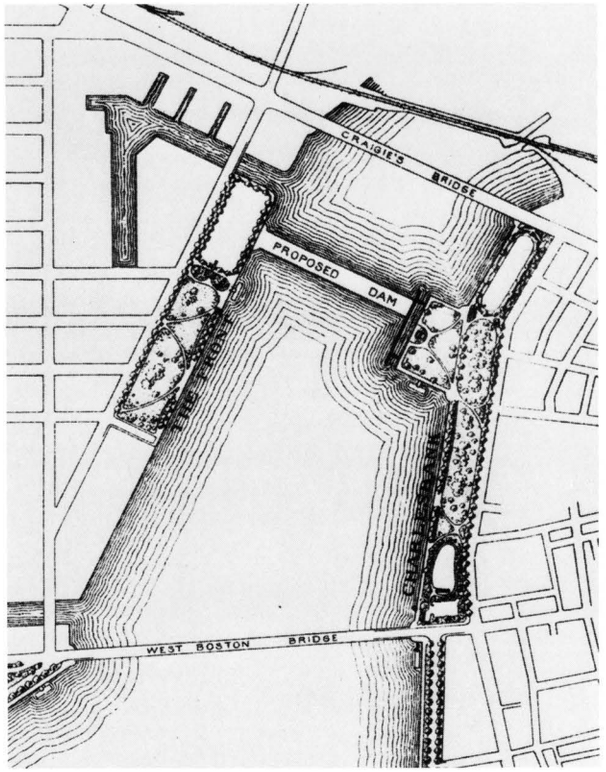
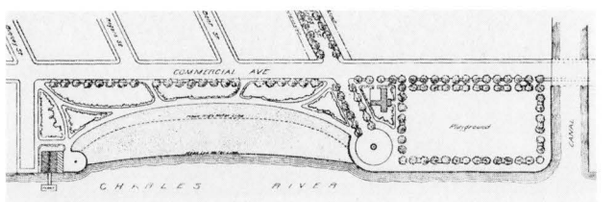
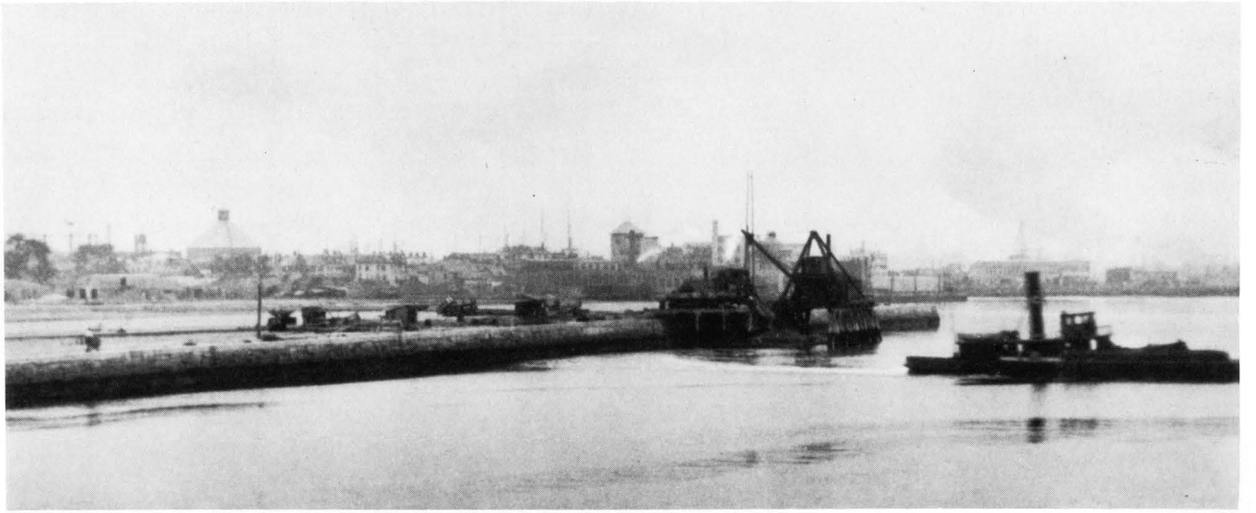


42. Plan of public reservations on the Charles River, 1893, Olmsted, Olmsted & Eliot



43. Plan of "The Front," 1894, Olmsted, Olmsted & Eliot



44. Building the seawall at the Front, c. 1895

45. Fill in place for Commercial Avenue, from the north side of the Lechmere Canal, 1900

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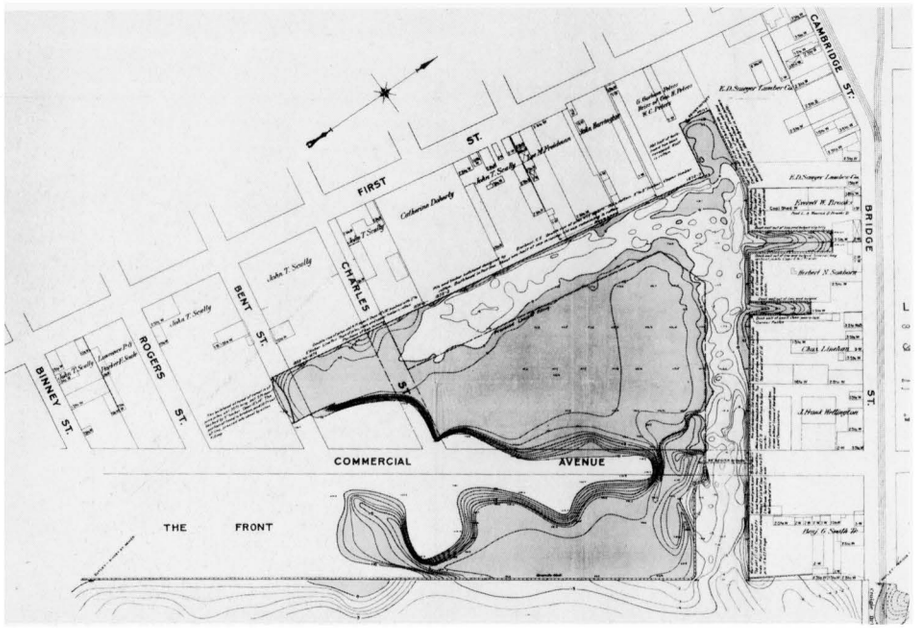
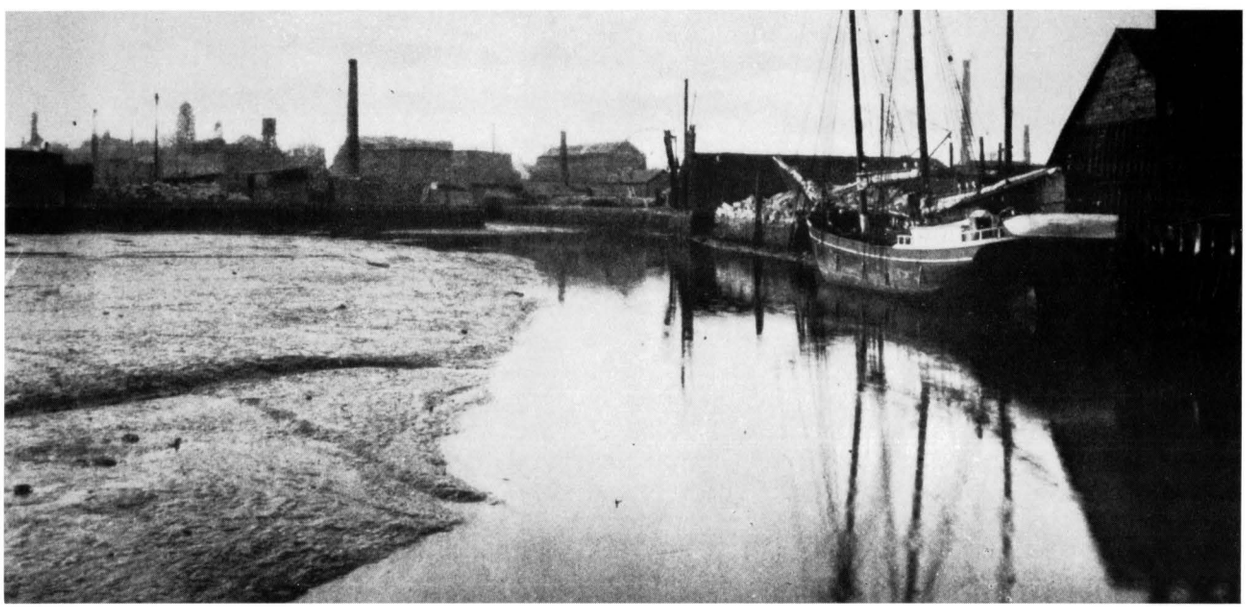


46. Lechmere Canal conditions in 1902

47. Broad Canal, west of Third Street at low tide, 1902



48. Lechmere Canal at half tide, 1902

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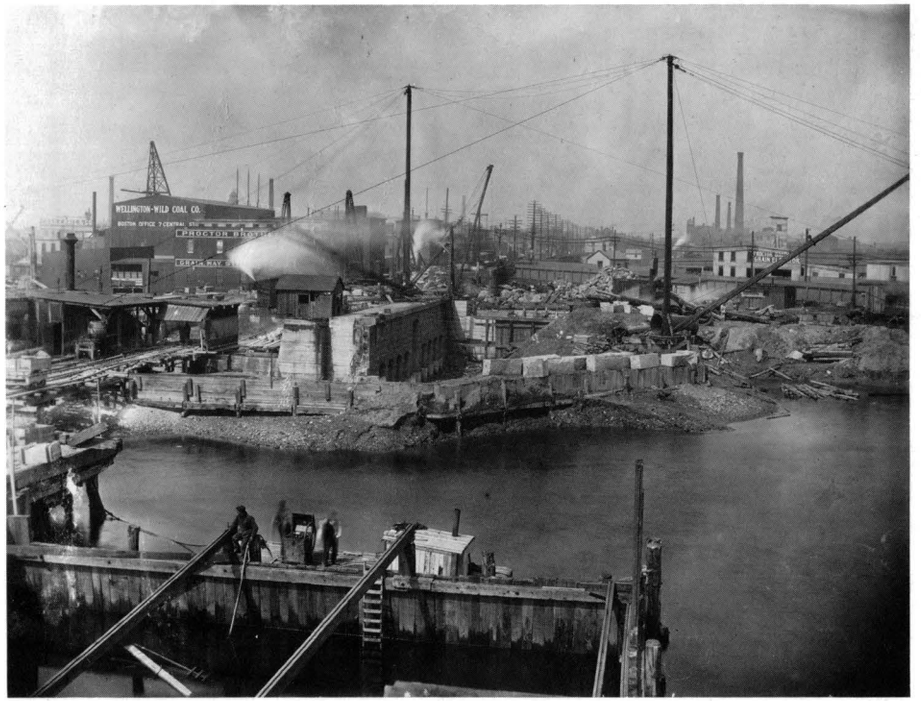
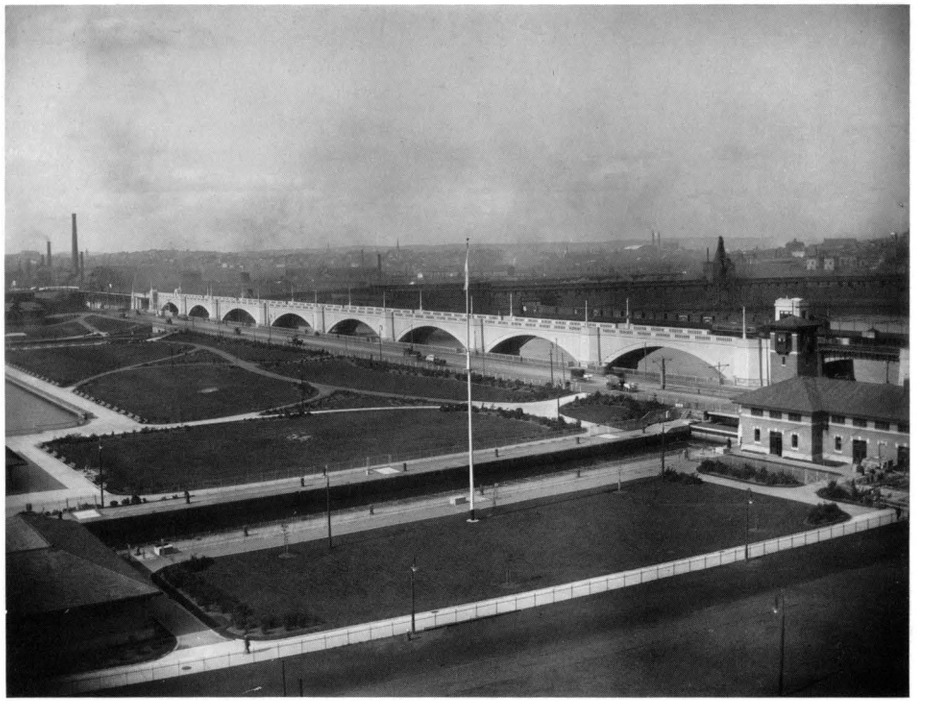
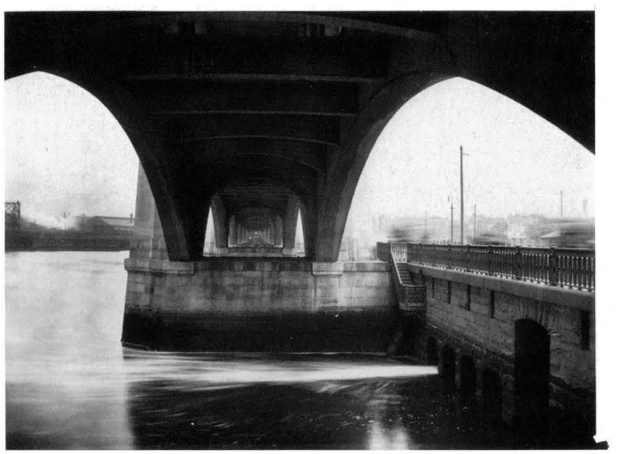


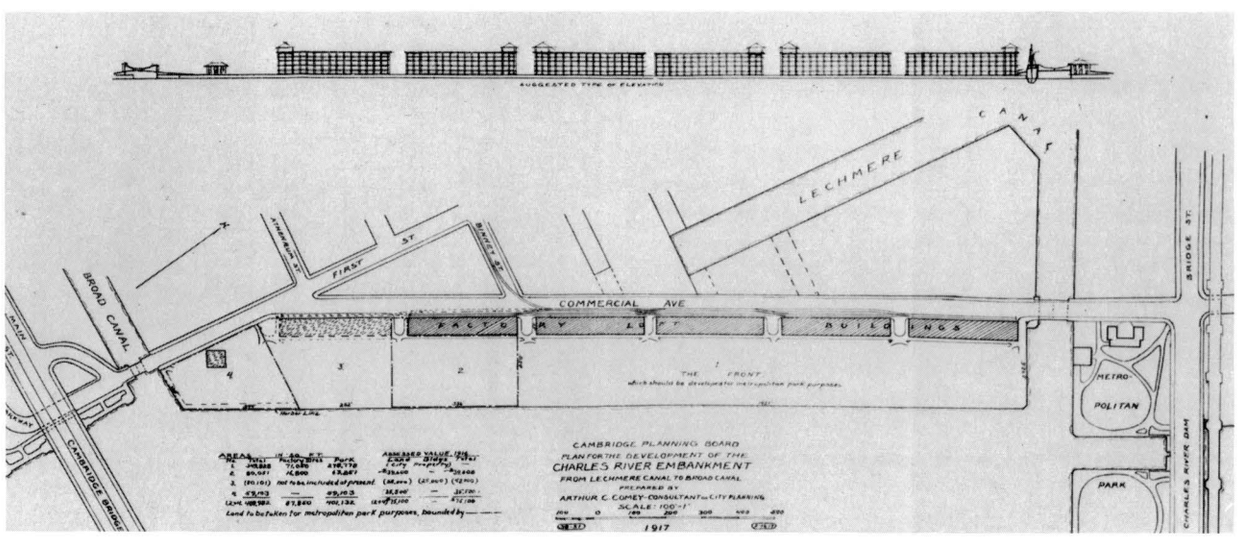
49. Charles River Dam under construction, 1908



50. Charles River Dam and viaduct with lock in foreground, 1913



51. East Cambridge Viaduct, view toward Boston, 1912; small boat lock in Charles River Dam at right



52. Plan for the Charles River Embankment, 1917

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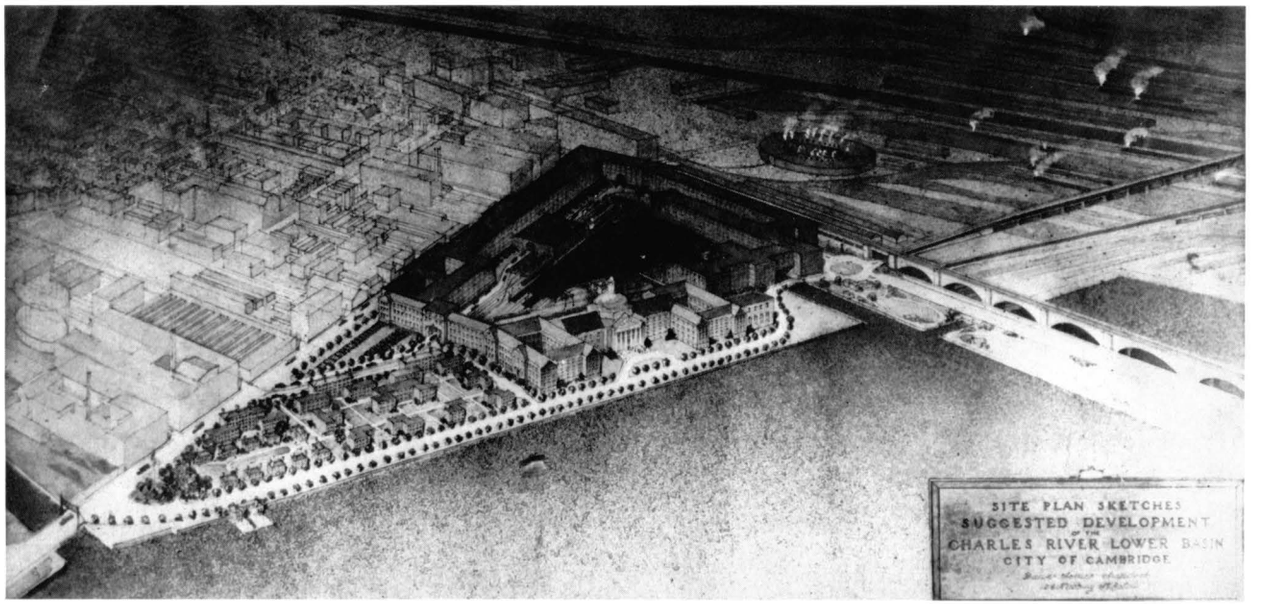
area for the park was begun. By 1897, Commercial Avenue was nearly completed, and in 1898, Binney Street was extended across First Street to Commercial Avenue. Most of the fill at this time came from subway construction in Boston (Fig. 45).

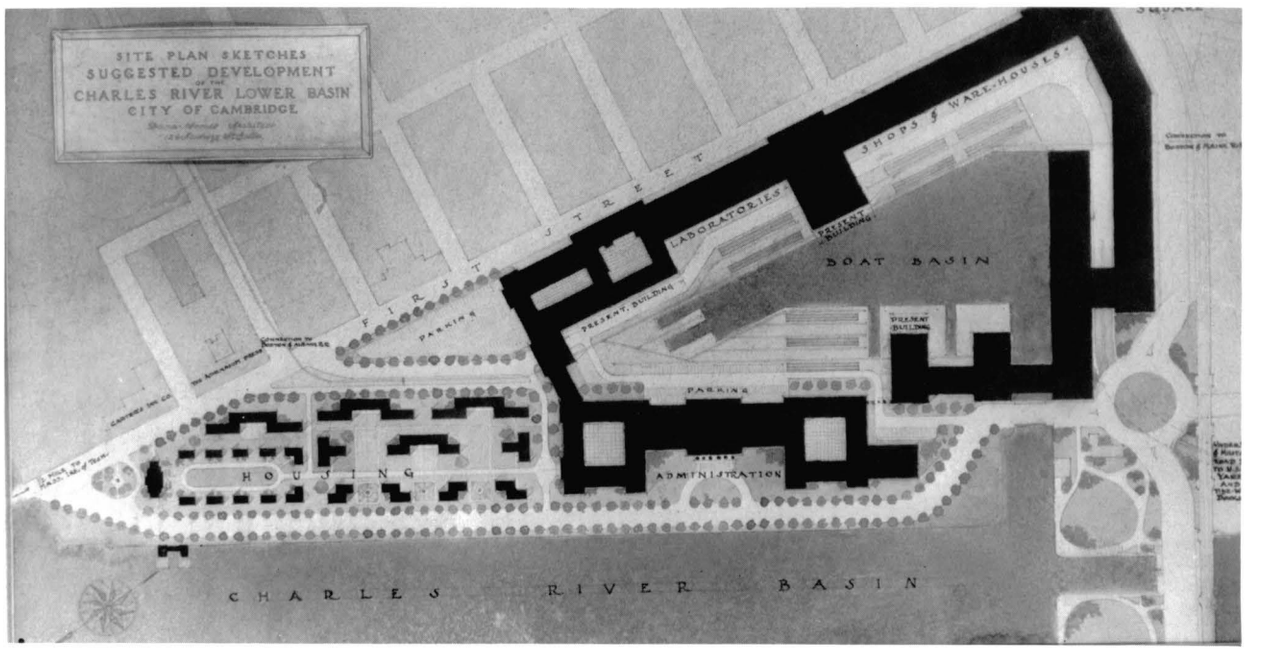
In 1899, the landscape architects revised their first plan for the Front, now called the East Cambridge Embankment. The new plan included a beach at the southwesterly end, a field house, and a playground. A concert grove was placed across from the field house, and a system of walks radiated from the bandstand to all parts of the grounds to complete the scheme. Even this revised plan, however, was delayed indefinitely.

The turn of the century brought many changes to the East Cambridge river front. By 1902, Athenaeum Street had been laid out to meet the needs of the Athenaeum Press, constructed in 1895. The Lechmere Canal had been extended as far as Bent Street by John Scully, who then owned most of the land surrounding it (Fig. 46). The most important change, however, came in 1903, when the General Court voted to create the Charles River Basin by constructing a dam at the Craigie Bridge.

The idea of damming the river disturbed commercial property owners in East Cambridge, particularly the merchants along the Broad and Lechmere canals (Figs. 47–48). When the dam was considered in 1902, Albert Pilsbury presented their concerns to the General Court's Committee on the Charles River Dam. He stated that the owners would withdraw all opposition to the dam if they were guaranteed a navigable channel deep enough to accommodate coal-bearing barges and schooners. When the act was passed in 1903, it contained specific provisions for keeping open the two canals. Through the 1940s, reports of the Cambridge Park Department and the Metropolitan District Commission contain numerous references to appropriations for ice breaking, dredging, and repairing walls in the canals. Eventually, however, the canals went out of general use, and in the 1960s the Broad Canal west of Third Street and the south branch of the Lechmere Canal were filled in.

The old Craigie Bridge was removed in 1905, and the dam and a viaduct for streetcars were completed





53–54. Proposed development of the Lechmere Triangle, c. 1925–30, Dana Somes, architect

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in 1912 (Fig. 49). In keeping with the concept of the Charles River Basin as a body of water surrounded by parkland, the dam included a broad, landscaped open space with a maintenance building and boathouse on the Cambridge side and locks on the Boston side (Fig. 50). In a coordinated effort, the Boston Elevated Railway simultaneously constructed the East Cambridge viaduct, which was designed to screen the railroad yards downstream from the basin (Fig. 51). The result was an extraordinary product of the City Beautiful movement; the soaring arches of the viaduct and the generously proportioned boulevard were in strong contrast to the Craigie Bridge, which had stood substantially unchanged since 1809. The construction of the Museum of Science, which began with acquisition of the site in 1949, has unfortunately obliterated the entire park.

With the completion of the dam, conditions appeared ideal for the waterfront park that the Olmsted firm had envisioned for East Cambridge. In 1913, however, the city decided to lease its land between Commercial Avenue and the river. Originally limited to wharves, terminals, and other shipping facilities, the property was eventually opened up to all commercial uses.

In 1916, the City Council first voted to turn the whole river front parkway area over to the Metropolitan Park Commission. In 1917, however, the Cambridge Planning Board proposed constructing municipally owned factories along the Front. The plan that the board submitted to the City Council suggested constructing factory loft buildings along Commercial Avenue while conveying a 200-foot-wide park along the river to the Park Commission as part of the Charles River Reservation (Fig. 52). A special act of the General Court was required to convert land intended for parks to commercial purposes, and an act releasing the Front and creating an industrial commission to guide its development was not finally approved until the early 1920s.

A narrow strip of the river front was granted to the Metropolitan District Commission for a park in the 1920s, but after Cambridge Parkway opened in 1928, between the Charles River Dam and the West Boston Bridge, the traffic posed such a hazard to children crossing the street that the bathhouse and ballfield near the river had to be abandoned. Olmsted obviously had not been able to consider the effect of the automobile in his 1894 plan. The need for recreational space in East Cambridge did not abate, however, and the canals continued to be used for illicit swimming by neighborhood children.

55. Lower Basin aerial view, c. 1947, showing victory gardens along Cambridge Parkway

The parcel of land between Cambridge Parkway and Commercial Avenue proved difficult to develop, as no company wanted to build on leased land. By 1934, only an office and manufacturing building at 27 Commercial Avenue (1916) and the Diamond Match Company warehouse at 45 Commercial Avenue had been erected on private land between the canal and Commercial Avenue, but nothing had been built between Commercial Avenue and Cambridge Parkway (see Fig. 37). Between 1925 and 1930, the Boston architect Dana Somes proposed an elaborate scheme for a development covering the entire area between First Street and Cambridge Parkway (Figs. 53–54). This comprehensive design included housing, factory, and warehouse space as well as parking, but it, too, remained only visionary, and the area remained virtually empty until the 1950s.

During World War II, this strip between Commercial Avenue and Cambridge Parkway was used for victory gardens, but in 1946 the city authorized the land to be sold rather than leased (Fig. 55). The first new struc-

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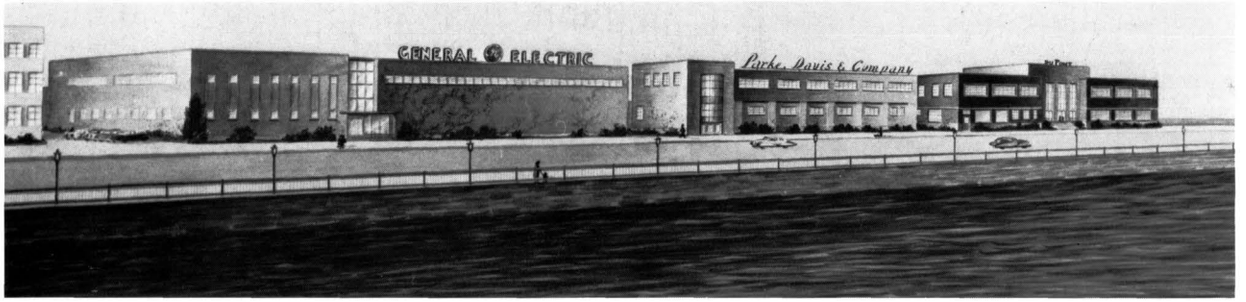

56. Rendering of 65, 47, 37 Cambridge Parkway, c. 1950

57. Lower Basin aerial view, c. 1957

58. Charter House Hotel, 3–5 Cambridge Parkway, 1961, Curtis & Davis

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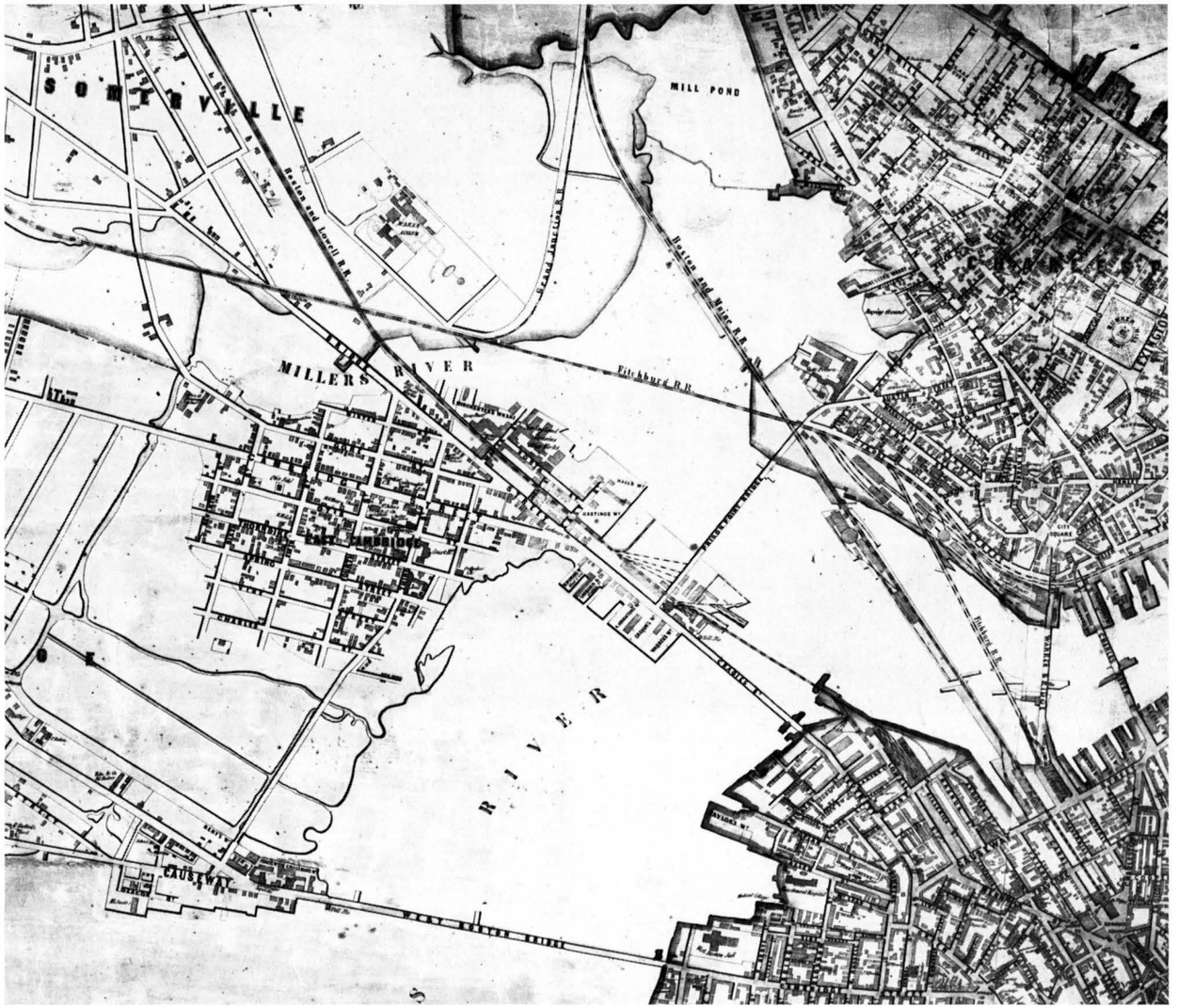
ture was a yellow brick veneer warehouse at 75 Cambridge Parkway for the Brown-Durrell Company, designed in 1946 by J. R. Worcester & Company. Development of this area gained momentum in 1950, when the Bostonians F. Murray Forbes of Cabot, Cabot & Forbes and Robert Nordblom of the Nordblom Company formed the Cambridge Parkway Investment Trust, bought the 180,000-square-foot parcel for $1.25 a square foot, and planned $700,000 worth of buildings. The city was concerned that any development on the river present an attractive face to Boston, so it mandated that any building constructed within the first ten years facing Cambridge Parkway had to be at least 35 feet in height and of brick or glazed tile construction. At the time of the sale, the trustees had already reached agreements with General Electric, Du Pont, and Parke Davis & Company for buildings designed by Jerome Foster (Fig. 56). Within a year, E. R. Squibb & Sons and Warren Brothers Construction Company had signed twenty-year leases (Fig. 57).

The development of the East Cambridge river front was completed in 1961 with the construction of the Charter House Motor Hotel at 3–5 Cambridge Parkway (Fig. 58), at the northern end of the street near the canal, although several parcels between Commercial Avenue and First Street remained empty. The next phase would involve the complete redevelopment of the Lechmere Canal area in the 1980s.

North of Bridge Street, 1873–1930

The Miller's River once occupied an extensive tidal basin shared by Cambridge, Charlestown, and Somerville (Fig. 59). The deepest channel lay close to the north shore of Lechmere's Point; a secondary channel lay along the Charlestown shore, close to the state prison, and was used by the Middlesex Canal to reach Boston. At the head of the basin in what is now Somerville, the Joseph Barrell mansion sat atop Cobble Hill, with an unobstructed view of Boston (Fig. 60).

The Barrell Mansion, designed by Charles Bulfinch and completed in 1793, was an important landmark. In 1816, the trustees of the Massachusetts General Hos-



59. Miller's River Basin and surroundings, 1852

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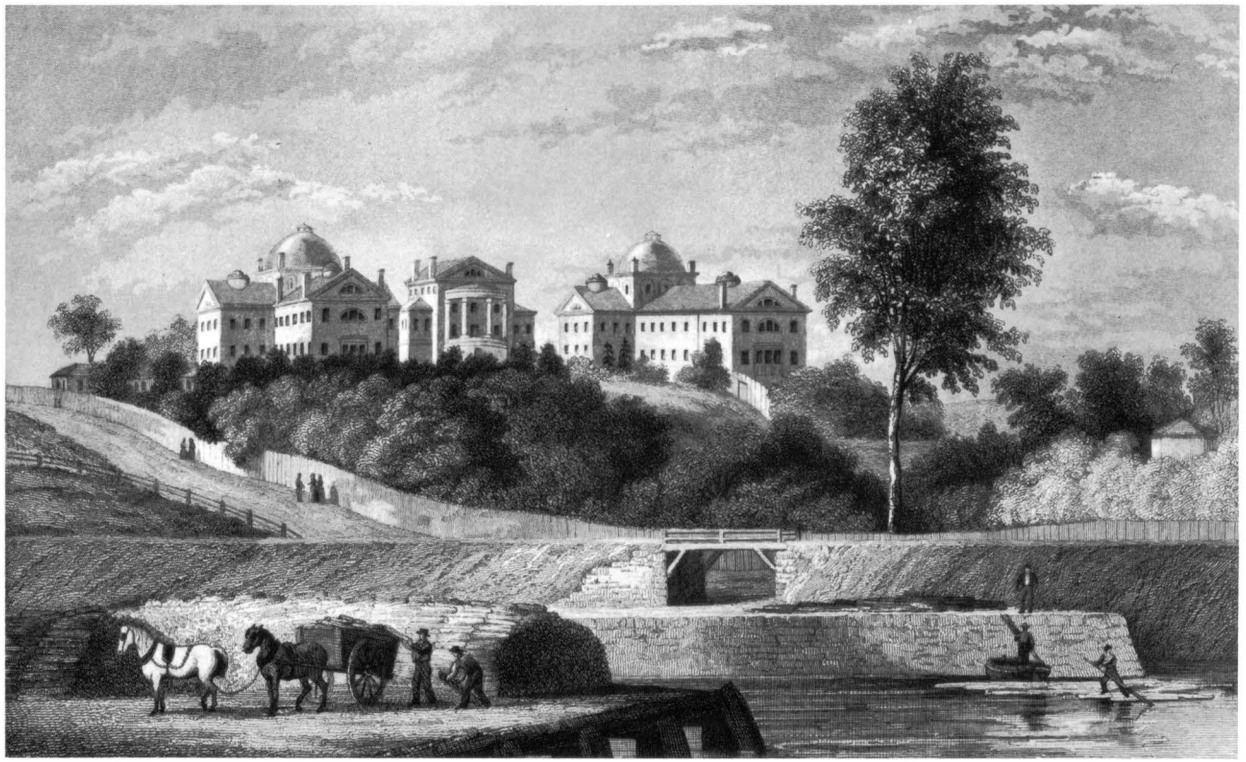

60. McLean Asylum in 1844, as seen from East Cambridge; Fitchburg Railroad embankment in middle distance

61. McLean Asylum grounds, c. 1900, with the Revere Sugar refinery and former New England Glass factory in background

pital purchased the 200-acre estate from Barrell's heirs and retained Bulfinch to design two wings and convert the mansion to serve as the Asylum for the Insane at Charlestown; it became the McLean Asylum in 1826. It had its own wharf on the Miller's River, providing easy access to the hospital across the Charles. By 1870, the asylum was almost surrounded by railroad tracks and industries (Fig. 61), and in 1895 it moved to its present site in Belmont. All the buildings were razed, and Cobble Hill was leveled.

Between 1832 and 1854, four main line railroads entering Boston from the north and west crossed the basin on trestles to reach depots on Causeway Street, and a belt line traversed them all. At first, most of the yards and engine houses were built on piles over the flats (Fig. 62), but soon the companies began to fill in the basin. Once the Middlesex Canal ceased operation, the north side of the basin could be completely filled, but the main channel of the Miller's River was maintained until the 1920s so ships could reach industries along the East Cambridge shore.

The Boston & Lowell Railroad, the first to enter Boston from the north, was incorporated in 1830. In 1832, it surveyed a line that bridged the Miller's River and ran across East Cambridge between Bridge Street and the New England Glass Company to a terminal near the Prison Point Bridge. This route required only a relatively short bridge across the Charles, which was built a few years later (Fig. 63). In 1854, when the railroad opened a route from East Street to a new passenger station in Boston, its roundhouse, shops, and yards remained near the Prison Point Bridge (see Figs. 127–128). To expand, the company had two choices: fill in the Miller's River or buy additional land west of East Street (Fig. 64).

In the 1860s and early 1870s, the railroad pursued the first alternative. Its title included rights to certain upland along the Miller's River, and fill could be obtained from excavations at the company's other holdings. In 1873, the railroad filled in one acre along the river to enlarge the freight yards used for lumber and other bulk freight destined for Boston. This task required constructing 500 feet of seawall, as well as 900 feet of wooden bulkhead to protect further filling.

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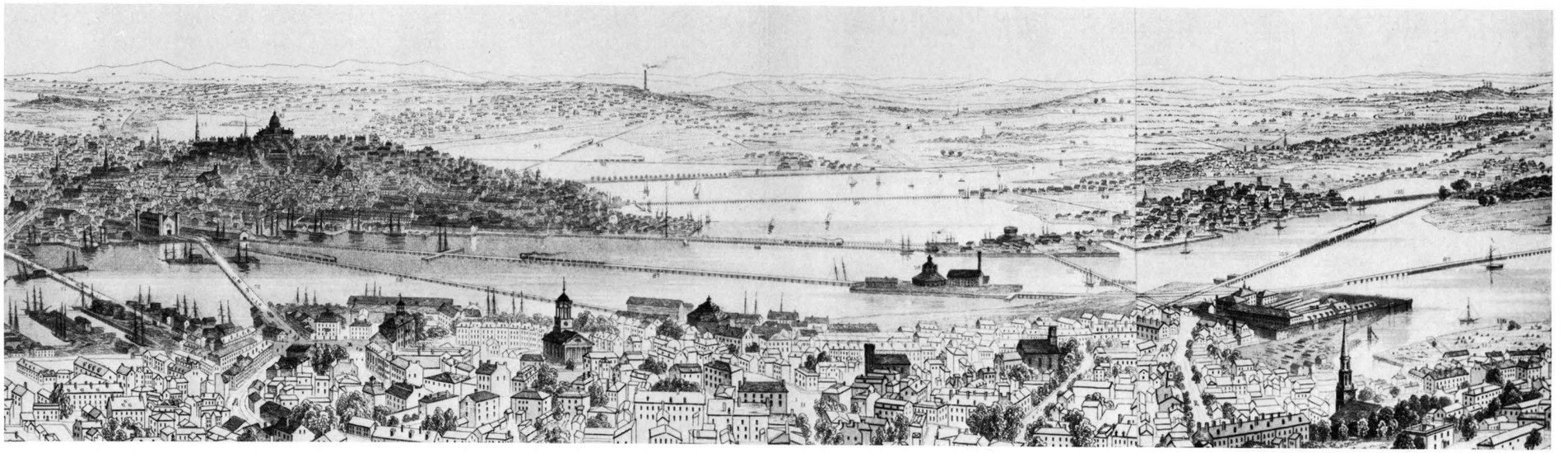
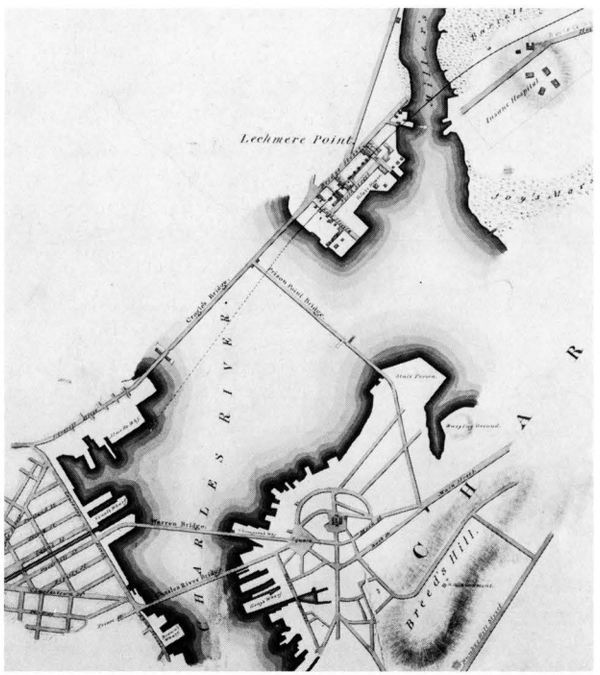
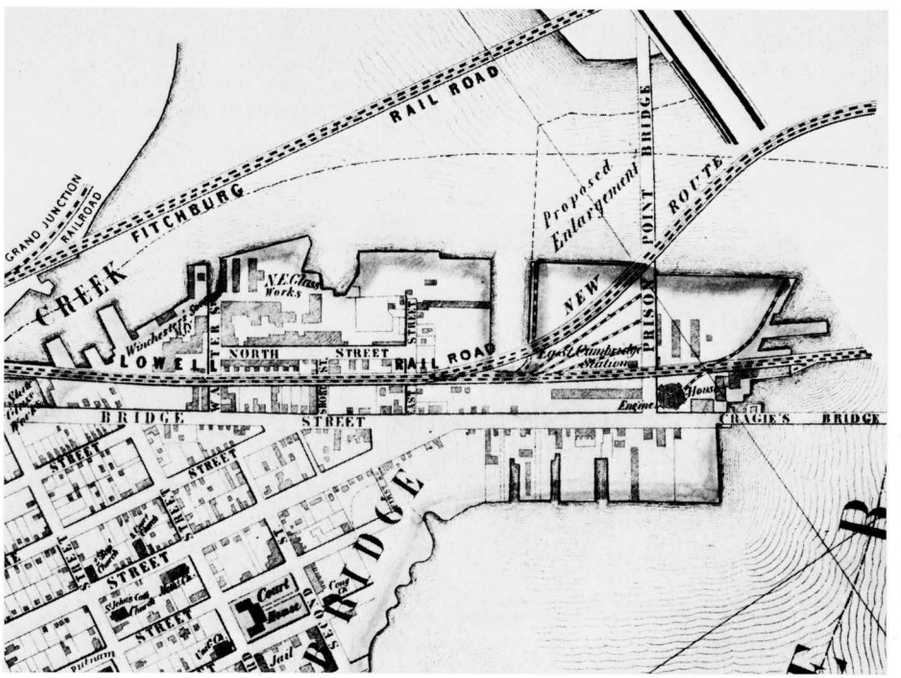


62. View from the Bunker Hill Monument, 1846. Left to right: State House; Charles River; East Cambridge; Miller's River; McLean Hospital; Charlestown Neck



63. Route of the Boston & Lowell Railroad, 1832



64. Miller's River frontage, 1854

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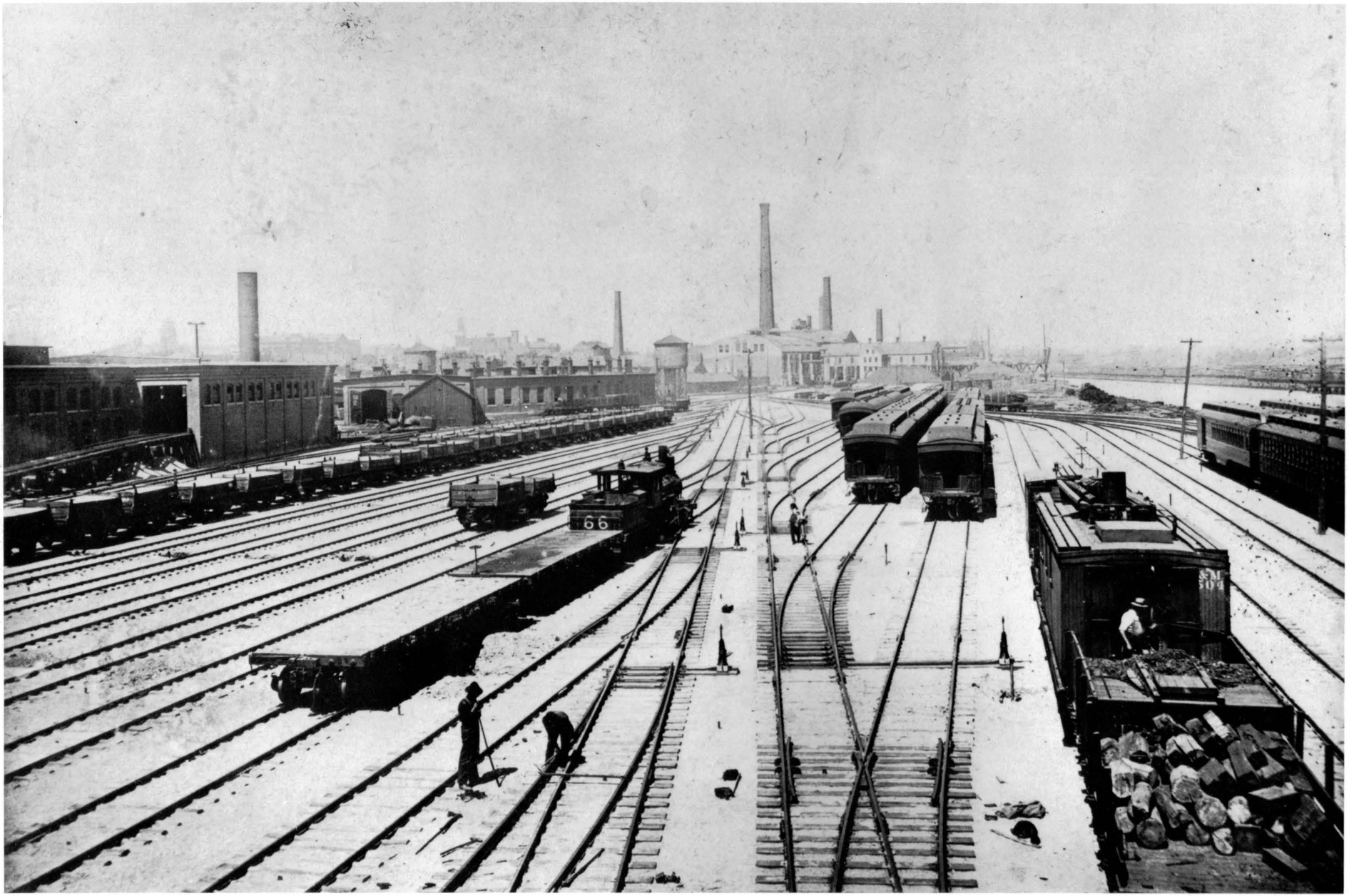

65. Boston & Maine Railroad yard 4, looking toward the former New England Glass factory, c. 1891–1903

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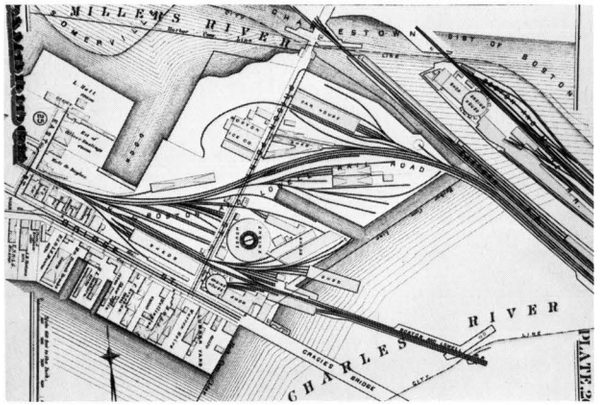

66. Boston & Lowell Railroad yards, 1886

67. Former New England Glass Company wharf, Miller's River, 1902

This work was abruptly curtailed, however, in 1874, when the Board of Harbor Commissioners sued the railroad for filling the flats without its approval. The legal question centered on whether an owner, who under his title had begun work on the flats before the passage of the act in 1866, could continue without authorization from the harbor commissioners or the legislature and without paying compensation for tidewater displaced. In addition, the commissioners sued both Cambridge and Somerville to restrain them from filling in the basins above the Boston & Lowell Railroad. Under Chapter 304 of the Acts of 1873, these cities had been authorized to abate the nuisance of the Miller's River, and their solution was to fill in the river. However, the commissioners wanted to review all filling plans and the commonwealth to be compensated for any tidewater displaced. They feared that filling in the Miller's River would adversely affect the depth of Boston Harbor. Although the Supreme Judicial Court decided in 1875 in favor of the commissioners, the Boston & Lowell had to pay only for tidewater displaced and filling accomplished since the legal proceedings had begun.

After the court decision, however, all further filling was delayed until increased traffic required more land. During the late 1870s and early 1880s, the railroad submitted several plans to the harbor commissioners to increase its wharf space. The largest filling operation occurred in 1878, when the flats on the east and west sides of Prison Point Street were reclaimed. By 1883, filling was extended on the west side of Prison Point Street to the old harbor commissioners line.

In 1887, the Boston & Maine Railroad leased the Boston & Lowell for a term of ninety-nine years, thus beginning a new phase of development north of Bridge Street. While the Boston & Lowell continued to hold title to its property, the Boston & Maine, as lessee, could exercise its rights to fill in the Miller's River. It also actively sought to buy property west of East Street.

The 1886 *Cambridge Atlas* shows that tracks, roundhouses, and auxiliary railroad buildings now covered most of the land on both sides of Prison Point Street (Figs. 65–66). In 1896, the harbor commissioners approved filling the last open dock on the south side of the Miller's River; the basin then assumed the form of a canal, with a continuous seawall and bulkhead (Fig. 67). During the next twenty years, the Boston & Maine acquired the property between the tracks and Bridge Street and greatly increased its holdings in East Cam-

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68. Boston & Maine yards and the Miller's River, 1923

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69. Boston & Maine Railroad office building, 167–169 Bridge Street (1925, architect unknown), and construction of the Northern Artery

bridge. To expand its freight yards even further, in 1895 the railroad purchased McLean Asylum in Somerville, demolished the buildings, and leveled the hill on which it stood.

Land ownership in this part of East Cambridge was simplified in 1918 when the Boston & Lowell was merged into the Boston & Maine. The railroad continued to buy property. In 1921, it purchased from the West End Street Railway Company its generating station in the former factory of the New England Glass Company, between Water, Short, and North streets and the Miller's River, and demolished the great glass house chimney and all the remaining buildings. Among the last industries north of Bridge Street to relinquish its property to the railroad was the Revere Sugar refinery. In 1918, the refinery began moving to Charlestown and in 1925 sold its property to the railroad. By this time the grand scale of the yards could only be comprehended from the air (Fig. 68).

In preparation for demolishing the four stations of its predecessors and constructing the present North Station on Causeway Street, the railroad constructed an office building in 1925 at 167–169 Bridge Street (Fig. 69). This eight-story reinforced concrete structure housed a thousand employees, but was vacated by the railroad after the completion of the present North Station in 1928. At about the same time, Bridge Street was widened on both sides and designated the Northern Artery, and the railroad completed the demolition of all the factories and houses that once stood north of the Boston & Lowell tracks.

In the 1950s, the decline of rail traffic in northern New England led to the contraction of the railroad's facilities. A new management sold off much of the yards for commercial use, and most of the area from Bridge Street (now Msgr. O'Brien Highway) to the Somerville line is now filled with a random collection of freight transfer facilities and warehouses, many of them built in the 1950s and 1960s. The original street pattern and all the early industries have disappeared, and no evidence remains of the Miller's River except an inlet on the Charlestown line. Studies are now under way to convert the area to new uses, although the remaining Boston & Maine yards — now owned by the Massachusetts Bay Transportation Authority — are considered essential for freight and passenger traffic.

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70. Lechmere Canal, 1976

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20th-Century Redevelopment: The Lechmere Triangle and Kendall Square

The Lechmere Triangle development project and the Kendall Square Urban Renewal Project offer striking contrasts in the planning and execution of urban redevelopment: they differ in planning and design theory, implementation, funding, and result. The differences are fundamental. Kendall Square represents a theory of urban renewal that was conceived in the 1920s and came to fruition in the 1950s and '60s, whereas the concepts embodied in the Lechmere Triangle project evolved in the 1960s and '70s in direct opposition to the earlier approach. Both projects are moving to successful conclusions, fueled by an expanding regional economy.

The Lechmere Triangle

After World War II, many industries in East Cambridge went out of business or moved, a pattern typical of older New England industrial areas. By the 1970s, the blocks near the Lechmere Canal, dominated by empty structures and parking lots, looked bleak (Fig. 70). Several significant structures, such as the National Casket Company building at 122 First Street (Fig. 71), were demolished, and others, including the former Middlesex County Courthouse, were vacant and threatened with destruction. The city began to realize that to change this situation, it would need a plan for stimulating and guiding development. Large property owners hoped for a renaissance based on large-scale redevelopment. Neighborhood residents, on the other hand, feared the impact of this approach. The zoning reflected the industrial uses that had prevailed since the late 19th century: there was no limit on height, and no housing was allowed.

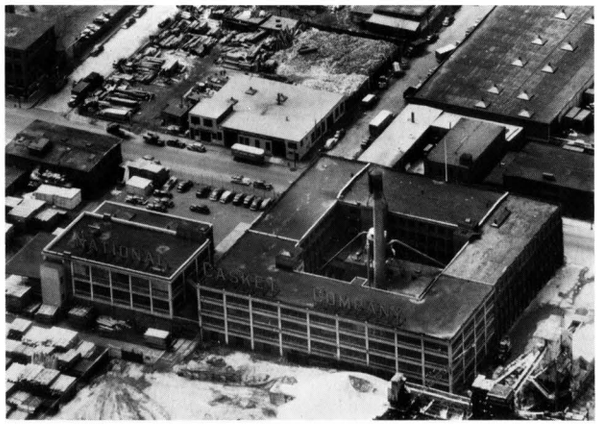
Between 1975 and 1977, the Community Development Department conducted a planning and urban design study on behalf of the Planning Board to help resolve these conflicts. The resulting *East Cambridge Riverfront Plan*, published in 1978, established development goals for the following decades. The plan tried to encourage the private sector to develop a lively mix of activities, with a balance of housing, retail, and office uses. These uses were to be located in a variety of structures, both new and renovated, as the plan emphasized the importance of historic rehabilitation and provided guidelines for new buildings.

These privately developed buildings were to be set amid a network of new public parks and pathways that would form a connected sequence of open spaces. The heart of this system would be a new Lechmere Canal Park, with a 60-foot-high fountain in the middle of the reconstructed canal (Fig. 72). A public arcade centering on the fountain would allow people to walk south to a new, triangular Charles Park. Across Commercial Avenue would be the new Front Park. As part of this project, traffic on Cambridge Parkway would be redirected onto a widened Commercial Avenue and the river front landscaped with only a narrow roadway (Fig. 73).

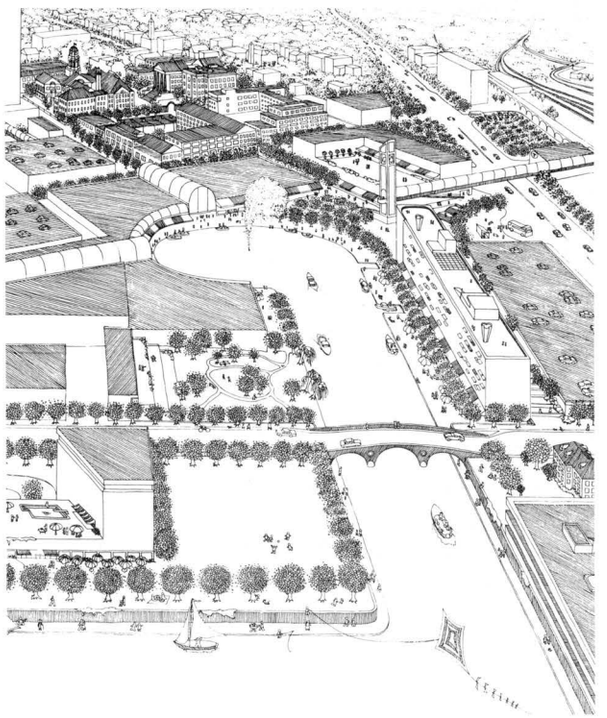
As the plan suggested, the City Council adopted a comprehensive rezoning for the area in late 1978, designating it a Planned Unit Development (PUD). This measure greatly reduced the allowable density, created an overall height limit of 120 feet, encouraged housing, and established a design review process for all but the smallest projects.

The plan is being executed with few modifications. Aided by generous federal and state subsidies and a booming regional economy, the Lechmere Triangle will contain a new urban center oriented to research, retail sales, and expensive housing in a fully planned environment next to the older neighborhood (Fig. 74).

Funds for the redevelopment have come from a variety of public and private sources. The city was



71. National Casket Company, 122 First Street (demolished), 1902, William H. Jones



72. Rendering of proposed Lechmere Canal Park, 1978

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awarded a $6.8 million Urban Development Action Grant (UDAG) by the U.S. Department of Housing and Urban Development that enabled it to improve roads and build a parking garage and the Lechmere Canal Park. Initially, private interests invested about $63.5 million to match the UDAG grant. The buildings in this first phase included the Rowland Institute, the expansion of the Sonesta Hotel and an adjacent new office building, the rehabilitation of the Carter's Ink building for office use, and a small office building at First and Thorndike streets. By 1990, public grants totaling $46.8 million will have been matched by private investment of about $540 million.

The public improvements associated with the Lechmere Triangle project are unprecedented in Cambridge for their rich design. Lechmere Canal Park, by Carol R. Johnson & Associates, transformed the disused canal. The seawall was rebuilt with Deer Isle granite, and the basin was made into a circle with a 60-foot-high fountain as a focal point. On an axis with Thorndike Street, the fountain connects visually to the restored Bulfinch Courthouse and the older residential neighborhood. To the south, it establishes the center line for a pedestrian arcade by the shopping mall and leads to Charles Park, three blocks away. Other features of Lechmere Canal Park include a waterside pavilion inspired by Victorian gazebos, extensive plantings, works of art, benches, and paving (Fig. 75).

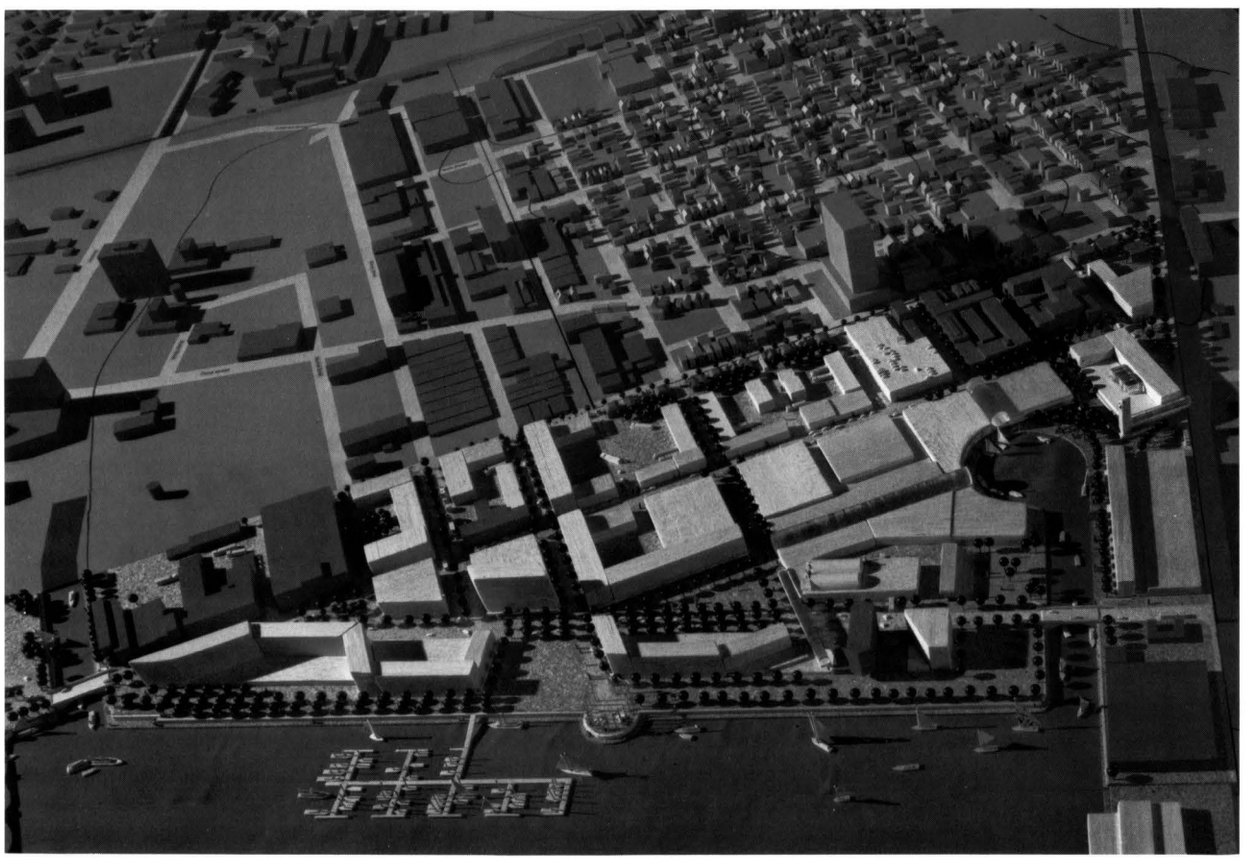
The new Front Park breaks the expanse of building along the river front, connects with the enlarged esplanade along the parkway, and creates a focus for the surrounding new buildings. It will also connect visually across Commercial Avenue to Charles Park.

Charles Park will be a triangular public space surrounded by the Lotus building on the west, the Galleria on the north, and the Sonesta Hotel and office building on the east. It will connect Front Park and the river front to the pedestrian arcade and Lechmere Canal Park. The adjacent developers have donated land and money for its design and construction.

The city has provided parking and reconstructed key arteries to accommodate the greater traffic that will be generated in the area. On the block bounded by First, Second, Thorndike, and Spring streets, the city now offers about a thousand parking spaces in a two-phase garage. The initial phase, on First Street, was designed by Sturgis, Vitols Associates (Fig. 76). Faced with waterstruck brick and containing ground-floor retail space, the garage is harmonious with its older neighbors, such as the rehabilitated Irving & Casson factory. The second phase, designed by Wallace Floyd Associates, is a simpler structure and is enlivened by works of art that are part of the architectural design (Fig. 77).

The rebuilding of major streets in East Cambridge, including First Street, Msgr. O'Brien Highway, Cambridge Street, Commercial Avenue, and Binney Street, has been essential to support redevelopment. This $20 million project also included a new stone-faced steel arch bridge to replace the old drawbridge over the Lechmere Canal and creation of more parkland along Cambridge Parkway by reducing the former six lanes of pavement to a narrow access road and diverting traffic to Commercial Avenue. Otis and Thorndike streets have also been treated as major pedestrian ways, leading from the old Middlesex County Courthouse to Lechmere Canal Park.

In 1981, the first three projects completed under the 1978 plan set the tone for the future. Along First Street, the rehabilitation of the Athenaeum Press and Ashton Valve Company buildings into office space



73. East Cambridge river front model, 1978

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74. East Cambridge development plan, 1988

75. Lechmere Canal Park, 1982–87, Carol Johnson & Associates

helped confirm the importance of historic structures as a context for development. The reinstallation of the statue of Athena on the pediment of the Athenaeum Press building, now called Athenaeum House, symbolized a new enthusiasm for the history of East Cambridge (Fig. 78). Just to the east is the Rowland Research Institute, by Hugh Stubbins & Associates (Fig. 79). This low building on the river's edge is a modern composition, but it respects the masonry tradition of the surrounding industrial area.

Between 1983 and 1985, three more new and rehabilitated structures opened. The historic rehabilitation of the American Net & Twine factory on Second Street into offices was completed in 1983 (Fig. 80). The 1910 Carter's Ink building on First Street, just south of the Athenaeum House, was renovated in 1984–85 and a penthouse added (Fig. 81). A new lobby was created behind the original building, linking it to a

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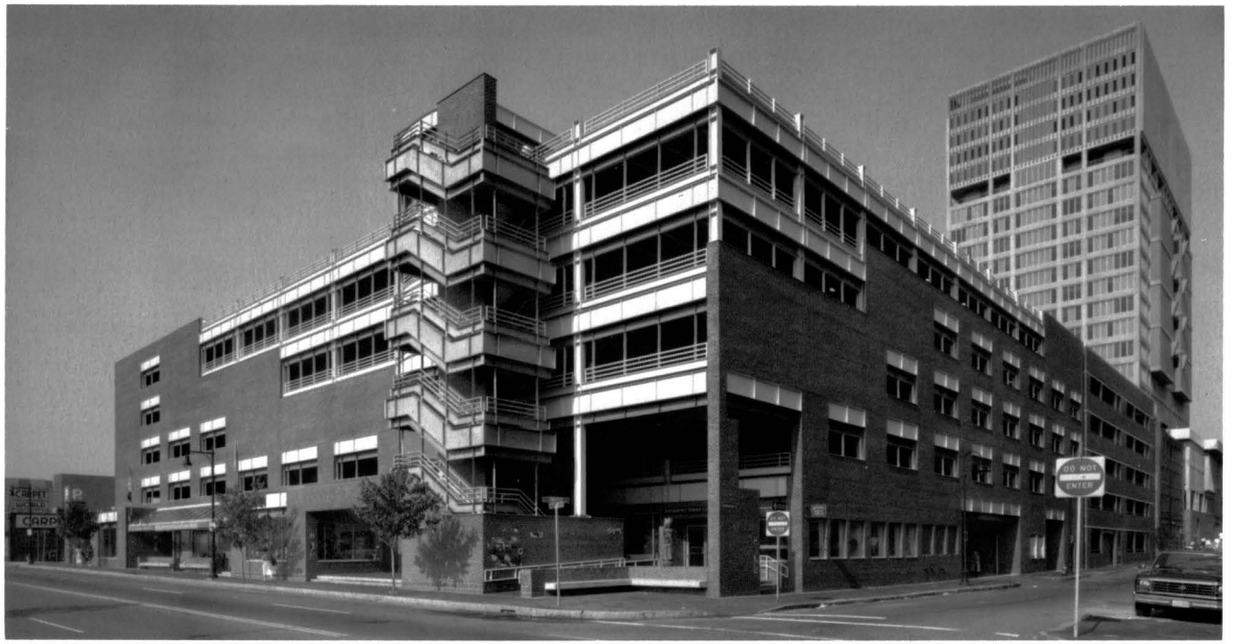
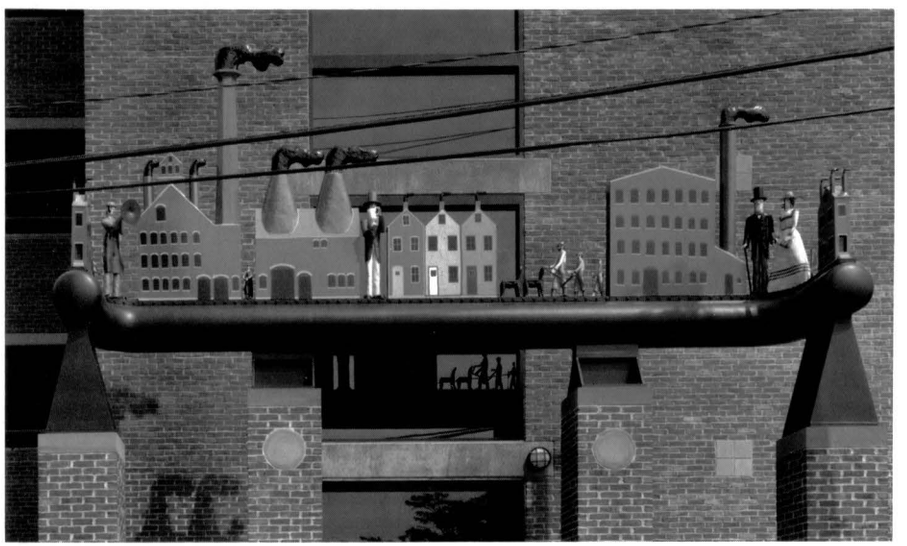


76. City parking garage, phase I, 55 First Street, 1984, Sturgis, Vitols Associates



77. Untitled art work by George Greenamyer, 1988, on city parking garage, phase II, 68 Second Street, 1987, Wallace Floyd Associates

78. Athenaeum House, 215 First Street, 1895, Lockwood, Greene & Company. Renovation by Symmes, Maini & McKee, 1979–83

79. Rowland Institute, 100 Cambridge Parkway, 1981, Hugh Stubbins & Associates

80. American Twine Office Park, 222 Third Street, 1875, original architect unknown. Renovation by Sutphin, Morris & Associates, 1982

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new 200-foot-high office and parking structure topped by a dramatic gabled roof by Huygens & DiMella. Perhaps nowhere else in the area is there such a vivid juxtaposition of old and new.

Another contrast was provided in 1984, when the Sonesta Hotel was joined by a Postmodern addition designed by John Olson, Architects (Fig. 82). Next door, the restrained modernist character of the Riverside Place office building, designed by Hugh Stubbins Associates and completed in 1985, contrasts with its more exuberant neighbor (Fig. 83).

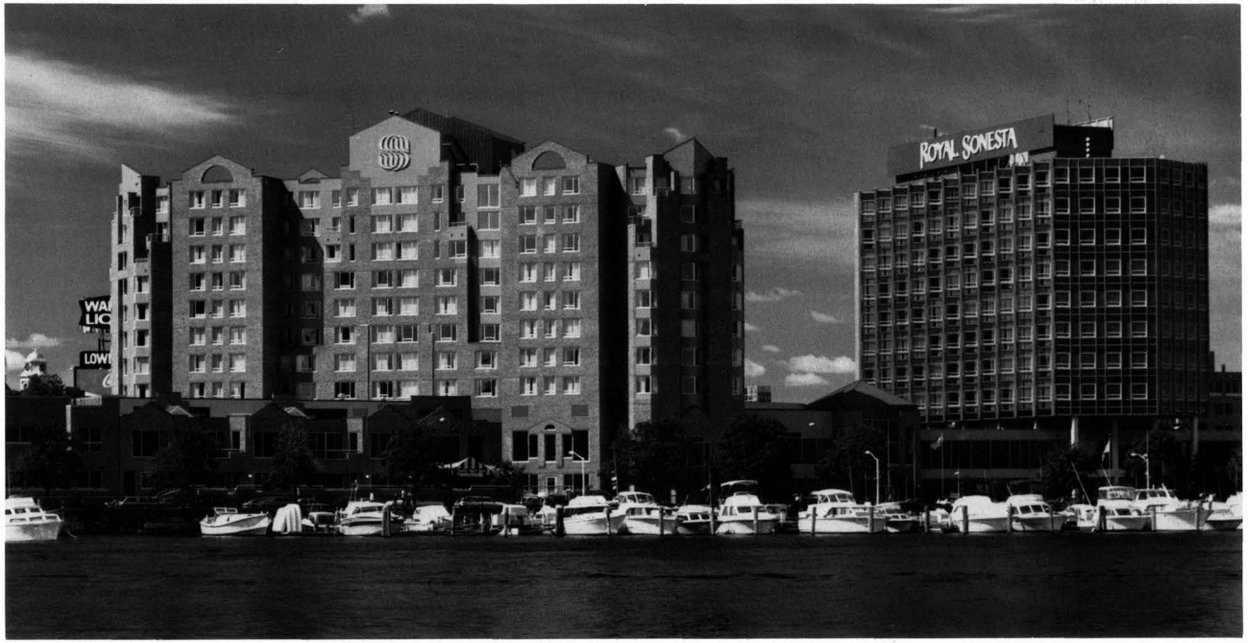
One of the showpieces of East Cambridge is Bulfinch Square, completed in 1986 on the block bounded by Second, Third, Otis, and Thorndike streets. (Chapter III gives a complete history of the courthouse complex.) The sensitive handling of the courthouse and the adjacent county buildings by Graham Gund Associates has established a high standard for historic preservation (Fig. 84).

Between 1985 and 1987, three private projects abutting Lechmere Canal Park began to take shape. The first was the Ten Canal Park (Interleaf) office building, with ground-floor retail space, for which Unihab Incorporated was both architect and developer (Fig. 85). The curved west wall of the building helps define the edge of the circular canal basin. Across the canal is Thomas Graves' Landing, a 166-unit condominium, also by Unihab (Fig. 86).

One Canal Park, designed by Tsoi/Kobus & Associates and completed in 1988, is the result of a competition sponsored by the city, which had acquired the land by eminent domain in 1978 (Fig. 87). The height and massing as well as the architectural treatment of this building were conceived to complement the restored Davenport Building, part of the extensive factory of Irving & Casson–A. H. Davenport, furniture makers (Fig. 88). This complex includes brick and frame buildings dating from 1869 to 1910 that have been converted into a mix of office and retail space by the Marcus Organization. Like the Bulfinch Courthouse and the American Net & Twine building, the Davenport building is a historic rehabilitation that conforms to National Park Service standards. While their preservation is highly desirable, the visual sterilization of

81. Riverview Office Complex (Carter's Ink Building), 245 First Street, 1909, Densmore & LeClear. Renovation by Priestly, Sterling, 1983, and office tower by Huygens & DiMella, 1985

83. Riverside Place, 55 Cambridge Parkway, 1984, Hugh Stubbins & Associates



82. Sonesta Hotel addition, 3 Cambridge Parkway, 1984, John Olson

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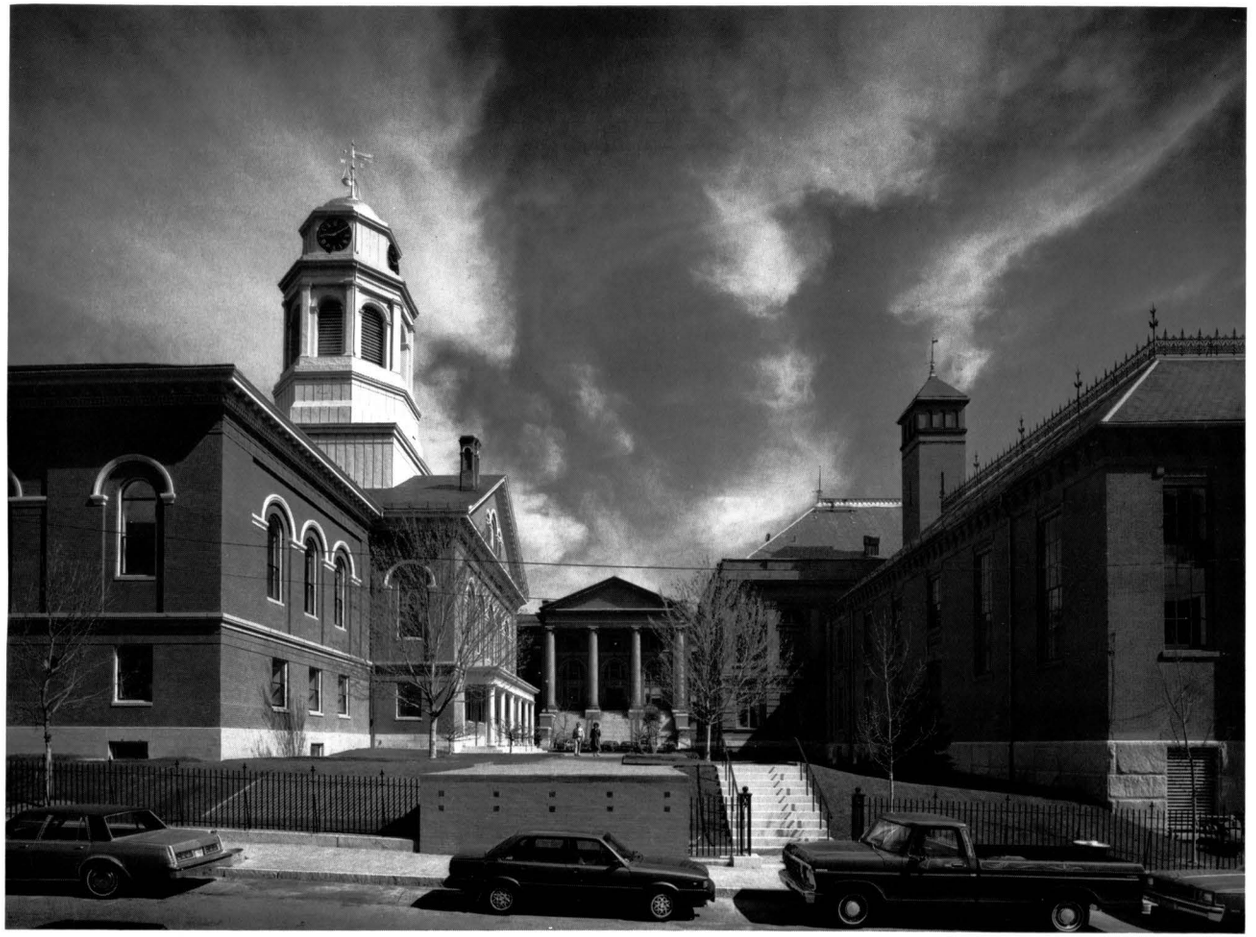

84. Bulfinch Square, 52 Otis Street, 1813–1924. Historic rehabilitation by Graham Gund Associates, 1981–86

85. Interleaf Building, 10 Canal Park, 1984, Unihab Incorporated

86. Thomas Graves' Landing, 4–6 Canal Park (Msgr. O'Brien Highway at Commercial Avenue), 1985, Unihab Incorporated

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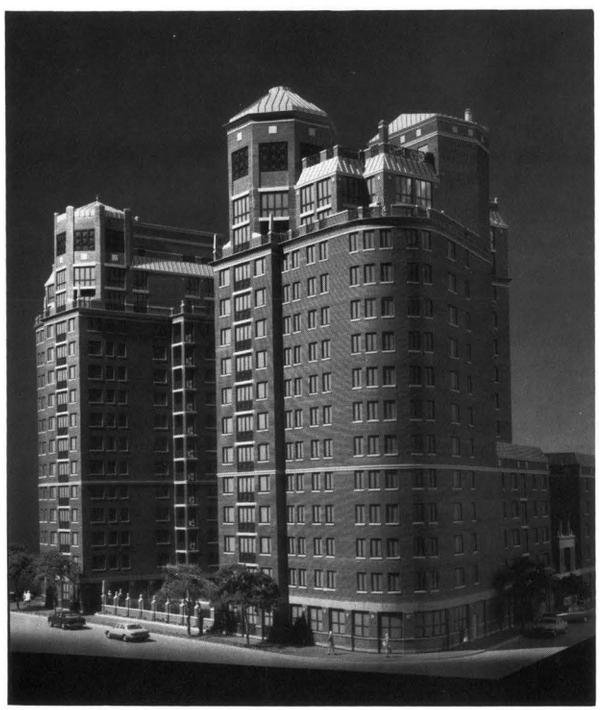
87. One Canal Park (40 First Street), 1986, Tsoi/Kobus & Associates



89. River Court (rendering), Commercial Avenue between Rogers and Binney streets, 1987, SBA/Steffian Bradley Associates

88. Davenport Building, 35 First Street, 1869–1910. Renovations by Sutphin Associates, 1985–88

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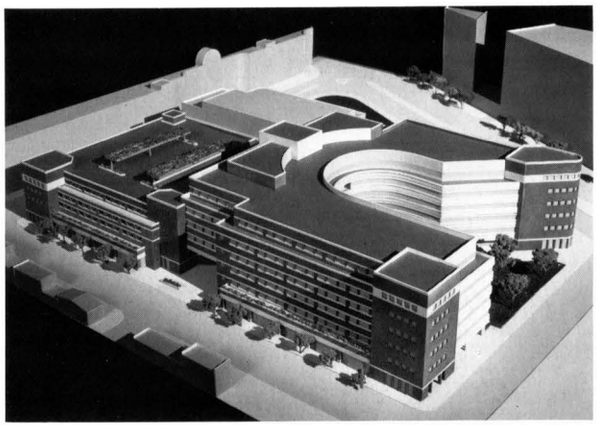
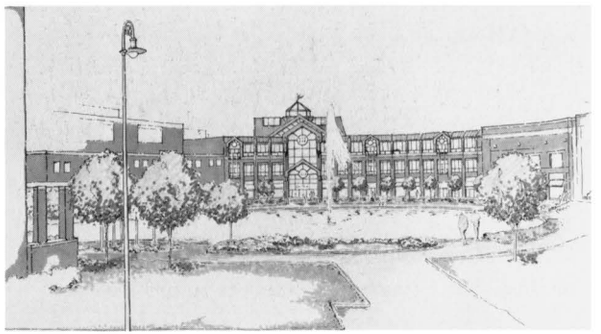
90. The Esplanade (model), Cambridge Parkway, 1987, Moshe Safdie & Associates



91. Lotus Building (model), 1 Rogers Street, 1988, Tsoi/Kobus & Associates



92. Cambridgeside Galleria (rendering), view from Lechmere Canal, 1988, Arrowstreet

these former factories diminishes the character of the neighborhood.

Two residential projects toward the southern end of the development will add an unprecedented degree of luxury to the East Cambridge housing market when completed in 1989. Between the Ashton Valve (now Lotus Development) building on First Street and Front Park along Commercial Avenue is the 14-story, 171-unit River Court residential condominium, by SBA/Steffian Bradley Associates (Fig. 89). A 50-foot-high building and courtyard faces First Street, while a more monumental structure 120 feet high faces Front Park. Just south of Front Park on the river is The Esplanade, a 13-story, 206-unit project by Moshe Safdie & Associates at 75 Cambridge Parkway (Fig. 90). The architect intends to create a Cambridge-style Habitat, although it will differ considerably from its Montreal antecedent. Condominiums in this building will sell for $176,000 to more than $1 million, and residents will enjoy a doorman, concierge, health club, and roof garden.

To the north of River Court will be One Rogers Street, an office building for the Lotus Development Corporation, for which ground was broken in June 1988 (Fig. 91). Designed by Tsoi/Kobus & Associates, One Rogers Street occupies almost an entire city block, but the building's mass is relieved by a south-facing semicircular courtyard.

The largest single project in the development area is a mixed-use center on a 10-acre site known as the Cambridgeside Galleria (Fig. 92). The Galleria will include three "anchor" stores, Sears, Roebuck & Company, Lechmere Sales, and Filene's, as well as many smaller shops, 80 condominiums, and an office building. The shops will line the First Street edge of the project and a three-level arcade between the Lechmere Canal and Charles Park. The Galleria will complete the spatial definition of Lechmere Canal Park, introduce housing to the southeastern end of the park, and bring immense activity to the entire area.

The radical transformation of the East Cambridge river front brings to a conclusion a planning process that began with the Cambridge Wharf Company in 1847 and has preoccupied the Cambridge Planning Board since at least 1917. The offices and warehouses of the 1950s were expected to complete the development of the river front, and no one could have foreseen that they would be replaced so rapidly (Figs. 93–94).

Kendall Square

Although Kendall Square is outside East Cambridge, its location next to the survey area, its parallel history of industrial development, and its recent redevelopment make it an instructive contrast with the Lechmere Triangle.

The West Boston Bridge opened in 1793, but significant commercial activity in the area of today's Kendall Square did not begin until after 1800. In 1805 two turnpikes, Broadway and Hampshire Street, were authorized to improve access from the bridge to inland Massachusetts towns, and by 1806 a network of canals accommodated coastal shipping (see Fig. 27). The intersection of Broadway with the causeway leading to the bridge (now Main Street) was called Dock Square, and the area as a whole was called the Lower Port.

The Embargo of 1807 and the War of 1812 prevented the area from developing as a port, so Cambridgeport came to depend on commercial traffic passing over the West Boston Bridge. In 1806, Royal Makepeace built six brick stores on Broadway at what became the corner of Court (now Third) Street, but they stood alone in the marshes for several decades (Fig. 96). The Lower Port was still surrounded by marshes, which inhibited development, and the preeminence of the West Boston Bridge as a commercial thoroughfare proved short-lived. In 1847, the publishers of the first Cambridge city directory complained that the railroads bypassing Cambridge and the opening of the new Quincy Market in Boston "have almost annihilated the extensive trade which was formerly carried on between the Port and the country towns, even as far back as the borders of Vermont and New Hampshire."

With the rise of Boston as a manufacturing center in the second half of the 19th century, the Lower Port became a desirable location for the shipment and storage of bulk materials. By 1854, filling had created solid

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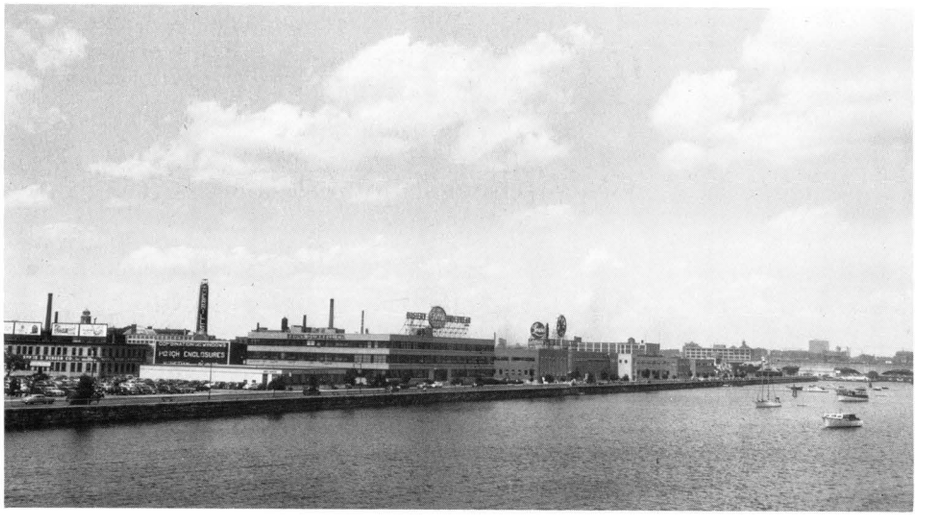
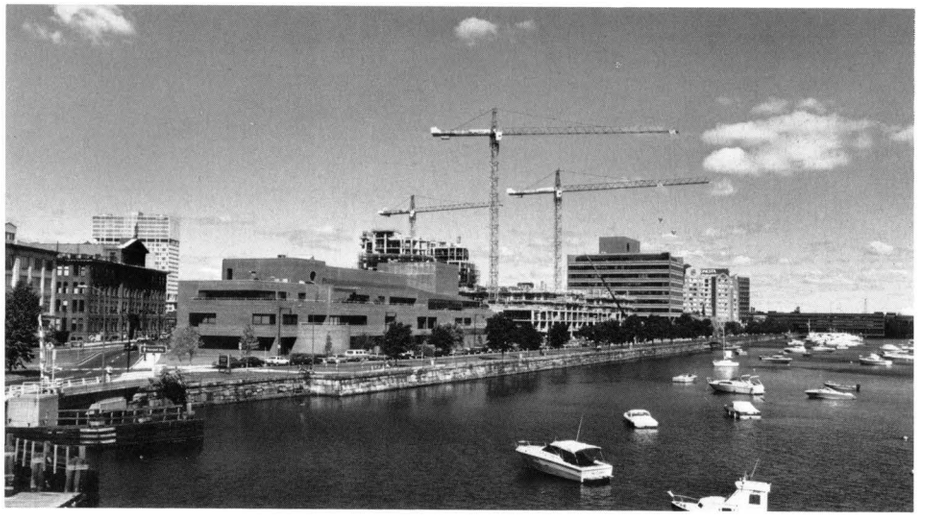
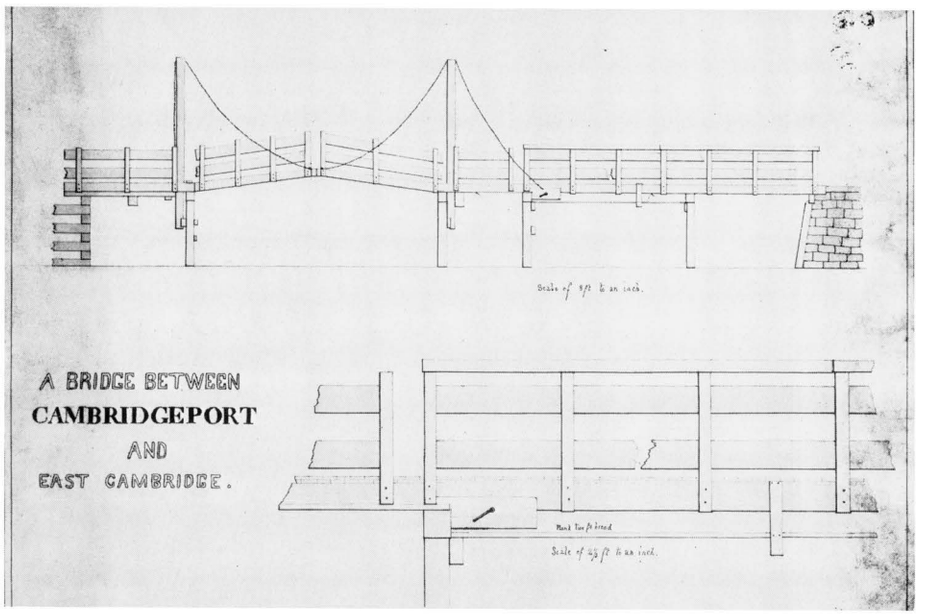


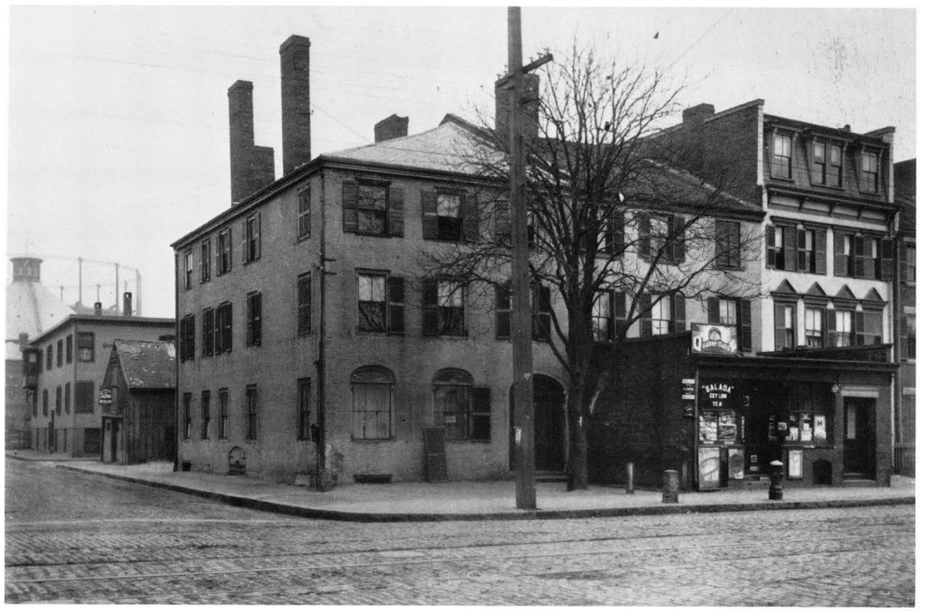
93. East Cambridge river front, c. 1954



94. East Cambridge river front, 1988



95. Third Street drawbridge over the Broad Canal, c. 1875



96. Royal Makepeace Stores, 7–12 Broadway, corner of Third Street, 1806. Photograph 1899

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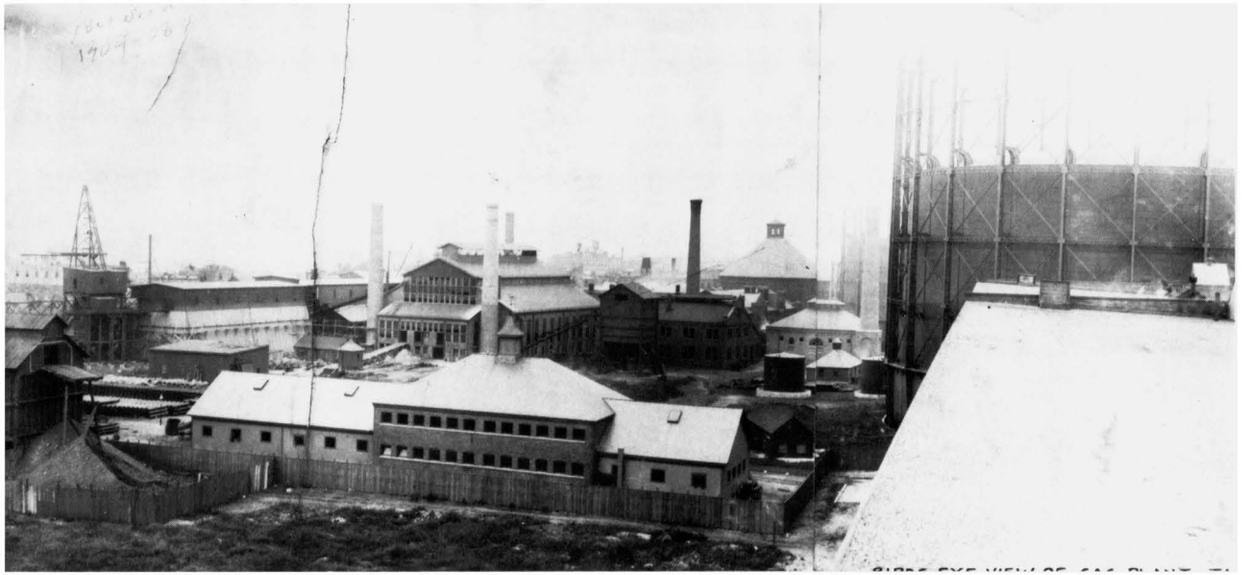
97. Schooner at William Wood & Company lumber wharf, Broad Canal at Third Street, 1892

99. Charles River Iron Works (Edward Kendall & Sons), 134 Main Street, 1899



98. Cambridge Gas Light Company, Third Street at the Broad Canal, c. 1905

land out of the triangle between the Broad Canal and the Charles River along Broadway and Main Street east of Portland Street, and wharves for coal, lumber, and stone lined the south sides of the causeway and the Broad Canal (Fig. 97). In 1868, service began on the Grand Junction Branch of the Boston & Albany Railroad, which gave Cambridge industries access to all the lines entering Boston from the north and west.

In the 1870s, the Lower Port began to attract more manufacturers, especially in the corridor along the Broad Canal and Broadway, as coal was still most economically moved by water. In 1871, the Cambridge Gas Light Company built a new plant on Third Street, just north of the Broad Canal, and in 1874 concentrated all its production there (Fig. 98). Other industries settling in this area included rubber factories, foundries, soap factories, and iron fabricators (Fig. 99).

In the 1890s, the triangle between Broadway, Main Street, and the railroad was still a residential neighborhood with its own elementary school (Fig. 100). By this time, the intersection of Broadway and Main Street had been renamed Kendall Square. Edward Kendall was a prominent businessman who had established his boiler factory on Main Street at the intersection of Broadway in 1860. He was also a deacon and politician who ran for governor in 1893. When the first subway train ran from Park Street to Cambridge in 1912, Kendall was among the passengers, who cheered him as the train pulled into the Kendall Square station.

The area still contained many wooden sheds and storage buildings, frame houses, and large tracts of open land, but the coming of the subway made the area increasingly attractive for manufacturing. By 1930, so many factories had been built in Cambridgeport that Cambridge was said to have had "a metamorphosis that characterizes it as much of an industrial boom town as Akron, Ohio, or Detroit, Michigan" (Stone, vol. 1, p. 773). Much of the 300 percent gain in manufacturing in the previous ten years had taken place in new factories in the Kendall Square area, whereas East Cambridge was the scene of displacement and contraction among its more mature industries (Fig. 101).

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After World War II, the industrial development of Cambridge ended. Some industrial buildings were converted to offices and laboratories, but many companies closed or moved to other regions. As they did, the Massachusetts Institute of Technology (MIT) often purchased their vacant factories (Fig. 102).

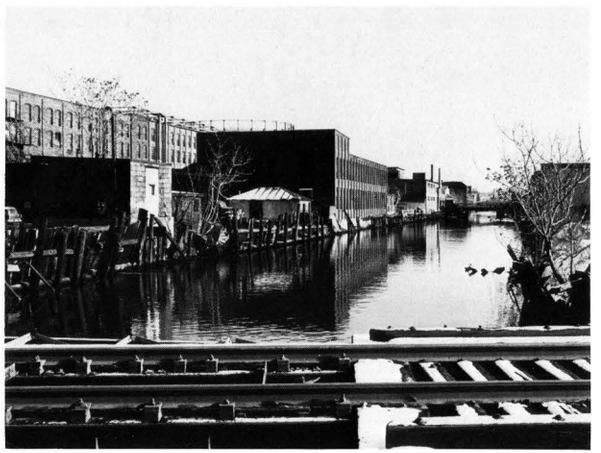
In the 1960s, Kendall Square became a microcosm of postwar urban renewal. Technology Square, at Main and Portland streets, was the first major project (Fig. 103). Comprising four buildings erected in place of factories and tenements between 1961 and 1966, Tech Square was developed by Cabot, Cabot & Forbes in association with MIT and the Cambridge Redevelopment Authority (CRA). Containing offices and laboratories for science and engineering firms, this complex set a new standard for development in the area.

The catalyst for the complete redevelopment of Kendall Square came in 1964, when the National Aeronautics and Space Administration announced that it would build its Electronics Research Center in Cambridge. At the same time, the city decided that blighted conditions in Kendall Square made it an appropriate location for a federally funded urban renewal project. NASA's center was established on September 1, 1964, in temporary facilities at Tech Square.

In August 1965, the CRA and the City Council approved a plan for the Kendall Square Urban Renewal Area that involved placing the Electronics Research Center on a 29-acre rectangular site just north of Broadway and redeveloping the adjacent triangle bounded by Broadway, Main Street, and the railroad tracks into high-density, tax-generating uses. Between 1966 and 1969, the CRA conveyed 14½ acres of the site to NASA. In this period, approximately 110 businesses were relocated, the existing buildings were razed, and the Broad Canal was partially filled.

The NASA complex, begun in 1965, comprised the first new buildings in the Kendall Square Urban Renewal Area. The original design by Edward Durell Stone underwent substantial revision. The initial scheme called for three twenty-four-story towers surrounded by courtyards and low-rise perimeter buildings on a superblock bounded by Broadway and Binney and Third streets. At the entrance was to be a monumental

100. Kendall Square, 1899



101. Broad Canal looking east from the Boston & Albany Railroad, 1966

102. Kendall Square and MIT, aerial view, c. 1950

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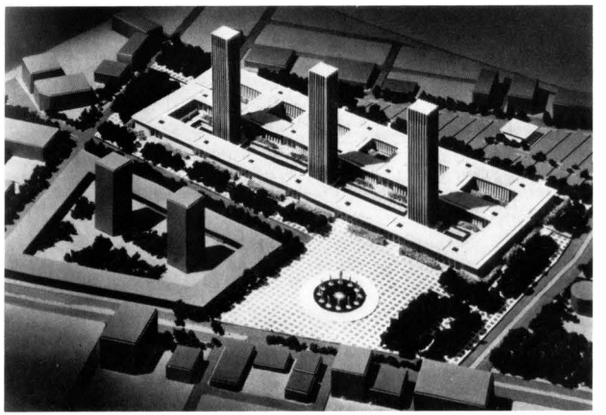
103. Technology Square, 565 Main Street, 1961–66; Cabot, Cabot & Forbes, Eduardo Catalano, and Pietro Belluschi



104. Kendall Square proposal, 1965, Edward Durrell Stone

courtyard with a circular fountain (Fig. 104). Only one tan brick tower, at half the original scale, was built. This slender twelve-story building, begun in 1968 and completed in 1970, reflects Stone's New York Civic Center (1963) and the University of Massachusetts (Amherst) Library (1965) (Fig. 105). Surrounding the tower are one- and two-story buildings in a more austere concrete modern style by The Architects Collaborative and Jackson & Moreland.

Across Third Street and outside the urban renewal area, the privately owned Cambridge Gateway, by Emery Roth & Sons, was built between 1968 and 1970 (Fig. 106). Developed by the Badger Corporation, which had been displaced by the urban renewal project, this office complex of reinforced concrete consists of a large tower and a curved garage in the brutalist Modern style. A twin tower planned for the eastern end of the garage was not built.

Fifteen years later, Cambridge Gateway was joined by two even more massive structures that were also outside the urban renewal area. The first phase of the Riverfront Office Park (Saddlebrook) building is a rather severe modern structure by Cambridge Seven Associates (Fig. 107). The use of red brick was required to help this building relate to its context; some ground-floor retail space animates the street level. The lighting and landscaping along Main Street and Broad Canal, which were completed in the second phase, help integrate this project with its surroundings. Directly across Main Street, the One Memorial Drive office building was completed in 1987. This project was not subject to design review. These massive buildings overwhelm the Longfellow Bridge and create a forbidding gateway to Kendall Square (Fig. 108).

In spite of a substantial investment, federal priorities shifted in December 1969; NASA's mushrooming budget was curtailed, and 800 employees were affected by the closing of the Cambridge facility. In 1970, however, the Nixon administration, under strong local pressure, converted it into the Transportation Systems Center of the U.S. Department of Transportation and hired 425 NASA scientists and technicians.

NASA's withdrawal forced the CRA to revise its thinking on the Kendall Square area, and between 1972 and 1974 a number of alternatives were proposed. The CRA began a new plan for the entire site while also working to retrieve its rights to the surplus NASA land west of Sixth Street. In July 1973, the City Council passed an order emphasizing blue-collar and nonprofessional white-collar jobs as priorities in the redevelopment of Kendall Square. In October 1974, the council endorsed a plan supported by the East Cambridge Planning Team, MIT, and the Kendall Square Businessmen's Association.

After 1974, the Kendall Square project regained momentum. In 1976, the CRA hired R. M. Bradley to provide marketing and development services and Monacelli Associates to prepare urban design controls. Finally, in 1977, the City Council unanimously approved the necessary amendments to the Urban Renewal Plan, including a new Cambridge Center mixed-use development zoning classification for the 24-acre undeveloped portion of the area.

In 1978, after a lengthy competition, the CRA selected Boston Properties to develop Parcels 3 and 4. A development agreement was signed in 1979, and in 1982 another agreement covered the remaining 11 acres of Parcel 2 (Fig. 109). Boston Properties initially retained Davis & Brody of New York City as master planner and architect, but that firm was replaced in 1980 by Moshe Safdie & Associates. The CRA retained Monacelli Associates as urban design consultants, and as landscape architects first Carol R. Johnson & Associates and then the Halverson Company.

The Cambridge Center Master Plan provided for 2.5 million square feet of new development in nineteen individual buildings related by their siting, massing, and materials to create a sense of harmony and an identity for the project as a whole. It was intended to accommodate a wide range of complementary uses. High-

105. NASA Electronics Research Center (now Transportation Systems Center), 55 Broadway, 1968–70, Edward Durrell Stone

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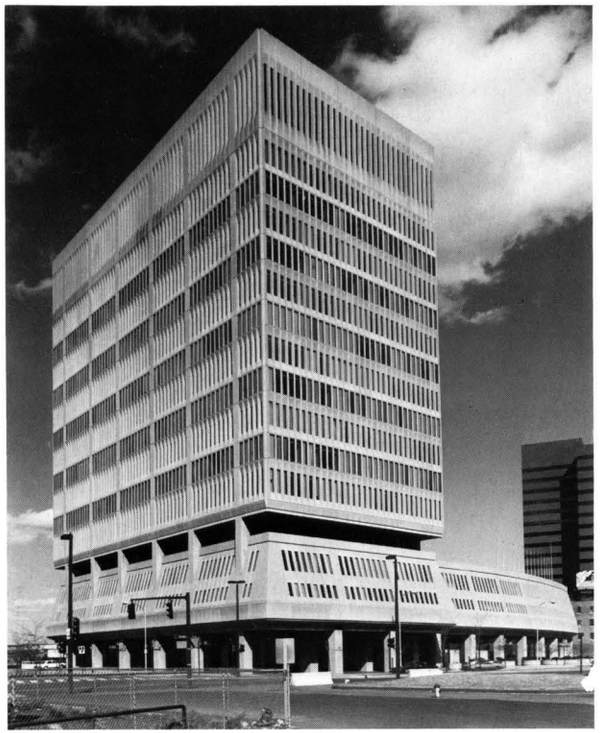

106. Cambridge Gateway, 11 Broadway, 1968–70, Emery Roth & Sons

107. Riverfront Office Park, 101 Main Street, 1982 and 1986, Cambridge Seven Associates

108. One Memorial Drive, 1986, Huygens & DiMella, and Riverfront Office Park

rise and mid-rise buildings with first-class office space are concentrated in the triangle between Main Street, Broadway, and the "western connector" extension of Binney Street on Parcels 3 and 4; housing on the Broadway side of Parcel 3 is designed to offer views of the Charles River, Boston, and Cambridge; and buildings of two to five stories on Parcel 2 north of Broadway provide space for research, development, and laboratory functions, the clearinghouse facilities of financial institutions, and light manufacturing. Other services at Cambridge Center include a hotel with business and conference facilities, more than 100,000 square feet of retail space, parking garages, parks, public plazas, and improved roadways.

A chronology of buildings gives an idea of Kendall Square's new identity in the 1980s. While Boston Properties has acted as the developer for all the new buildings, the CRA has design review authority and retains ownership of the land until each building is approved. Although the buildings have been designed by a variety of firms, the almost uniform use of Hanley brick as a building material (except for the garages) and design review enforce conformity. Parks, streets, and landscaping have been completed by the CRA.

Parcel 4 was the first area in Cambridge Center to be completed, with six buildings of varying heights and uses (Fig. 110). Five Cambridge Center (1981), at the corner of Main Street and the midblock connector, was the first privately developed structure in the renewal area (Fig. 111). This thirteen-story office building with ground-floor retail space was designed by Davis & Brody. Large concrete pillars and strip windows banded by half-round metal detailing provide interest on the Main Street side. Four Cambridge Center (1983), at the other corner of Broadway and the connector, is a twelve-story office building by Moshe Safdie that also contains retail space at the ground level (Fig. 112). The interplay of brick and glass animates the facade and produces an articulated silhouette that avoids the boxlike quality of many modern office buildings. Large windows extend almost to the ground, making the brightly painted lobbies along Broadway noticeable from the street. Between Four and Five Cambridge Center, the 863-car Parcel 4 garage was also designed by the Safdie firm. Built of precast concrete, it was opened in 1983. A one-acre park designed by the SWA Group occupies the roof of the garage and is open to the public.

The twenty-five-story, 431-room Marriott Hotel (1986) by Moshe Safdie is the tallest building in Cambridge Center and the city's largest hotel (Fig. 113). The massive brick and glass structure faces Main Street to the south, where it opens onto a large public plaza designed by Safdie and the German sculptor Karl Schlamminger in cooperation with Monacelli Associates (Fig. 114). The hotel site also extends north to Broadway, where the motor entrance is emphasized by a wide brick band that extends nearly the length of the building. Stepped facades on both the Main Street and Broadway sides create large corner windows.

Two additional mixed-use buildings complete the development of Parcel 4. Three Cambridge Center (1987), a four-story building by Safdie, contains the Harvard Cooperative Society on the ground floor and lower level and office space above. The store opens into a tall glass shed containing the Kendall Square subway station entrance and a food court for informal dining. At the junction of Main Street and Broadway stands One Cambridge Center (1987), also by Safdie (Fig. 115). Because of its unusually shaped lot abutting

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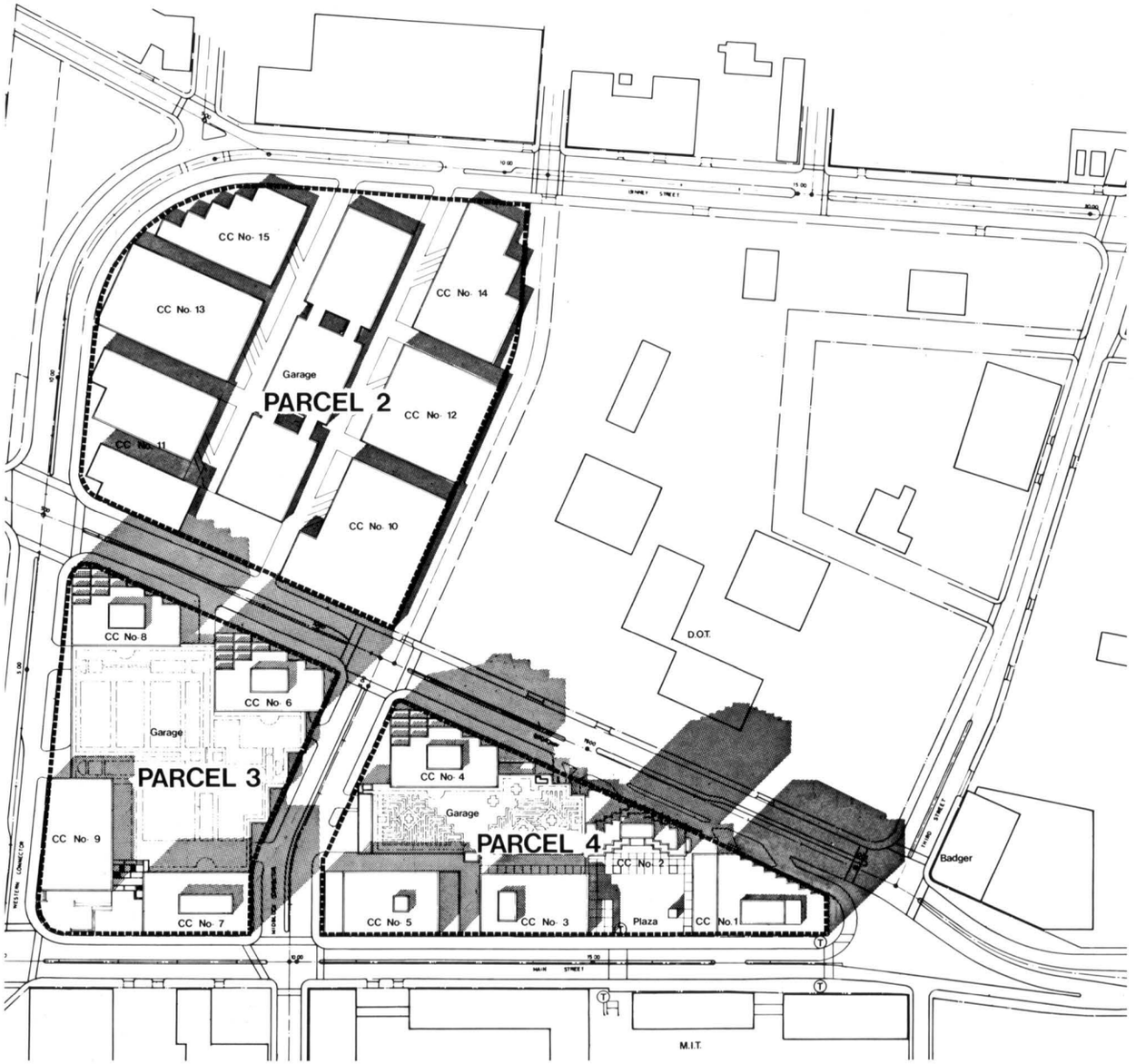

109. Cambridge Center, completed and future development, 1987

110. Parcel 4, Cambridge Center (model)

111. Five Cambridge Center (Main and Ames streets), 1981, Davis & Brody

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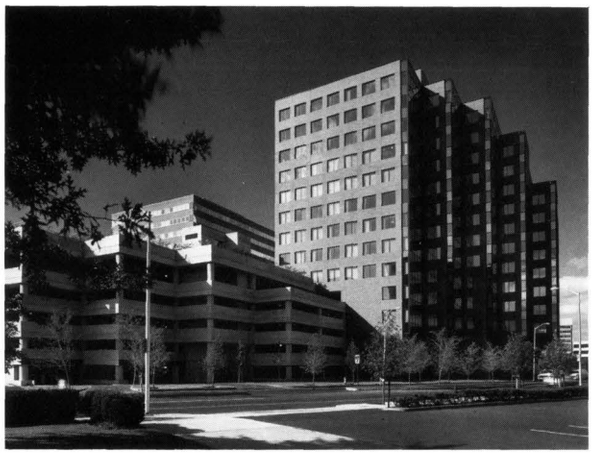
Point Park to the east and the public plaza to the west, this twelve-story brick and glass office building has four public facades and occupies one of the most prominent sites in Cambridge Center, but it does not provide the dramatic focal point that it might have. It replaces the Kendall substation, built by the Boston Elevated Railway Company in 1911. The side facing Boston has tall, indented glass panels that echo the triangular shape of Point Park. The large corrugated doors at ground level show that the building stands in part over a new substation, but create an odd appearance for this prominent facade. The lost opportunity for street-level activity is to be regretted.

The six-story Nine Cambridge Center (1984) was the first building on Parcel 3 (Fig. 116). Designed by Goody, Clancy & Associates, it contains the Whitehead Institute for Biomedical Research. The remainder of Parcel 3 awaits development.

Parcel 2, north of Broadway, has been designated primarily for research and development and light industry in a series of low-rise structures. Fourteen Cambridge Center (1982–83), by Huygens & Dimella, is a two-story tan brick laboratory and office building occupied by Biogen. Long strips of windows emphasize the building's horizontal quality, in contrast to the verticality of much of Cambridge Center. Eleven Cambridge Center (1984) is a four-story building designed by Safdie as the headquarters and research facilities of Symbolics, Inc. (Fig. 117). The brick and black anodized aluminum pergolas with trailing vines were designed to take advantage of its prominent corner location.

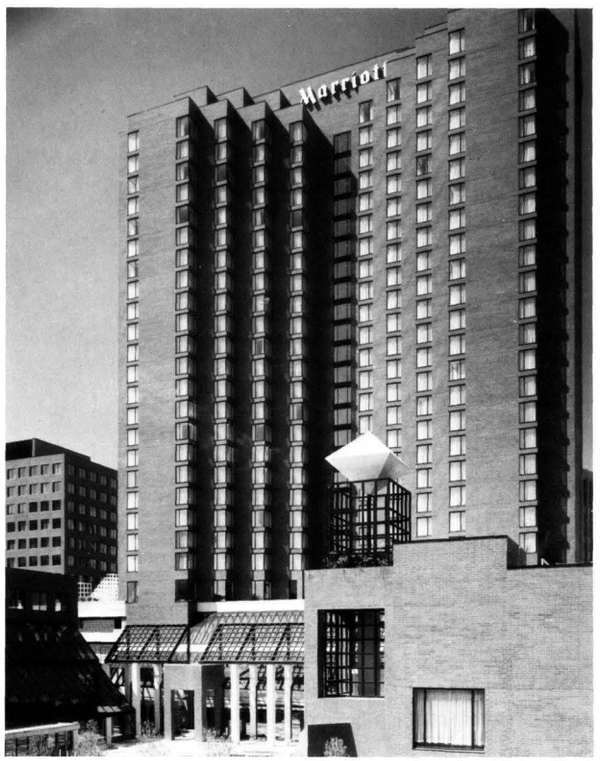
The main public improvements in Cambridge Center are parks, plantings, and streets, in addition to the plaza and rooftop garden already discussed. Point Park, at the apex of Main Street and Broadway, acts as a gateway to Cambridge Center. The design was a collaboration among Monacelli Associates, the Halverson Company, and the artist Otto Piene of MIT. The linear park from Binney Street to Broadway has been designed to connect residential East Cambridge to the business community in Kendall Square. Other improvements include new streets, planted median strips, brick sidewalks, and landscaping. The Kendall Square subway station, enlarged and modernized in 1987, has new entrances that connect directly to Cambridge Center.



112. Four Cambridge Center (Broadway at Ames Street), 1983, Moshe Safdie & Associates

The Kendall Square–Cambridge Center area has historically served as a valuable incubator for research and development firms. Attracted by its proximity to MIT, many businesses dealing with biotechnology, artificial intelligence, and computer technology have spent their formative years here, but as the price of office and research space rises it becomes questionable whether the area can continue to serve this purpose. The CRA's goals include attracting general businesses, such as insurance companies and financial services, retail stores, and housing to achieve a truly mixed-use district.

From conception to execution, Kendall Square stands in contrast to the Lechmere Triangle. The urban renewal program that funded the CRA project was rooted in the urban design precepts of Le Corbusier, who conceived of a modern city of isolated towers on vast superblocks linked by highways. This fundamentally anti-urban concept first found expression in the slum clearance programs of the 1930s, which in Cambridge almost eliminated the neighborhood west of Kendall Square. The Housing Act of 1949 enabled communities to implement clearance and redevelopment



113. Cambridge Center Marriott Hotel (50 Broadway), 1986, Moshe Safdie & Associates

114. Cambridge Center plaza, 1987, Moshe Safdie & Associates

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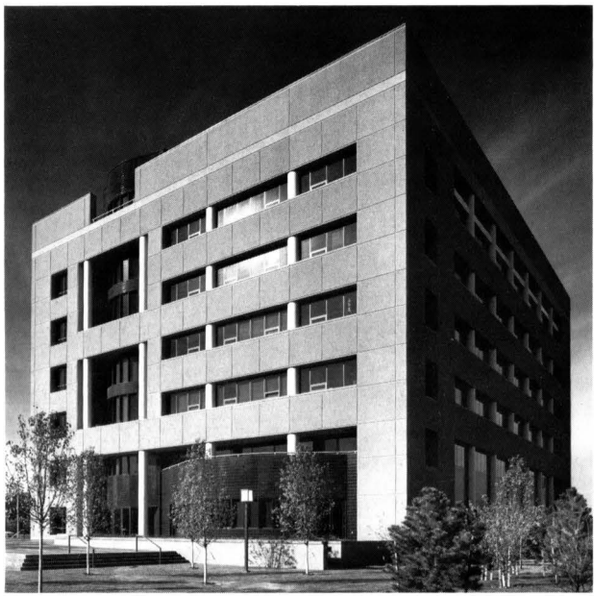
115. One Cambridge Center (Broadway at Main Street), 1987, Moshe Safdie & Associates



116. Whitehead Institute for Biomedical Research, Nine Cambridge Center (Main Street and Western Connector), 1984, Goody, Clancy & Associates

117. Eleven Cambridge Center (Broadway at Binney Street), 1984, Moshe Safdie & Associates

programs through independent local authorities funded by the federal government. At Kendall Square, the first plan was a clear expression of Corbusian concepts and resulted in a project completely unrelated to local needs and context. While the CRA has updated the original plan to conform to contemporary urban design theory, and buildings have been brought out to the sidewalks to create a more urban environment, the design of most Cambridge Center buildings reflects their enforced uniformity. The area as a whole still lacks the critical mass of density, mixed use, and visual interest necessary to create a vital urban neighborhood.

The planners of the Lechmere Triangle project have followed different precepts. Forgoing uniformity and absolute control, the Cambridge Community Development Department has emphasized a mix of imaginative public improvements, the rehabilitation of significant older buildings, and original architecture. Diversity has been encouraged by a funding mechanism leveraging public improvements to stimulate private investment that is much closer to free-market concepts; in contrast to Kendall Square, almost no development land in the Lechmere Triangle is publicly owned. While neither project will be completed for some years to come, the development at Lechmere holds greater promise of becoming part of the social and architectural fabric of its surroundings than does Cambridge Center.

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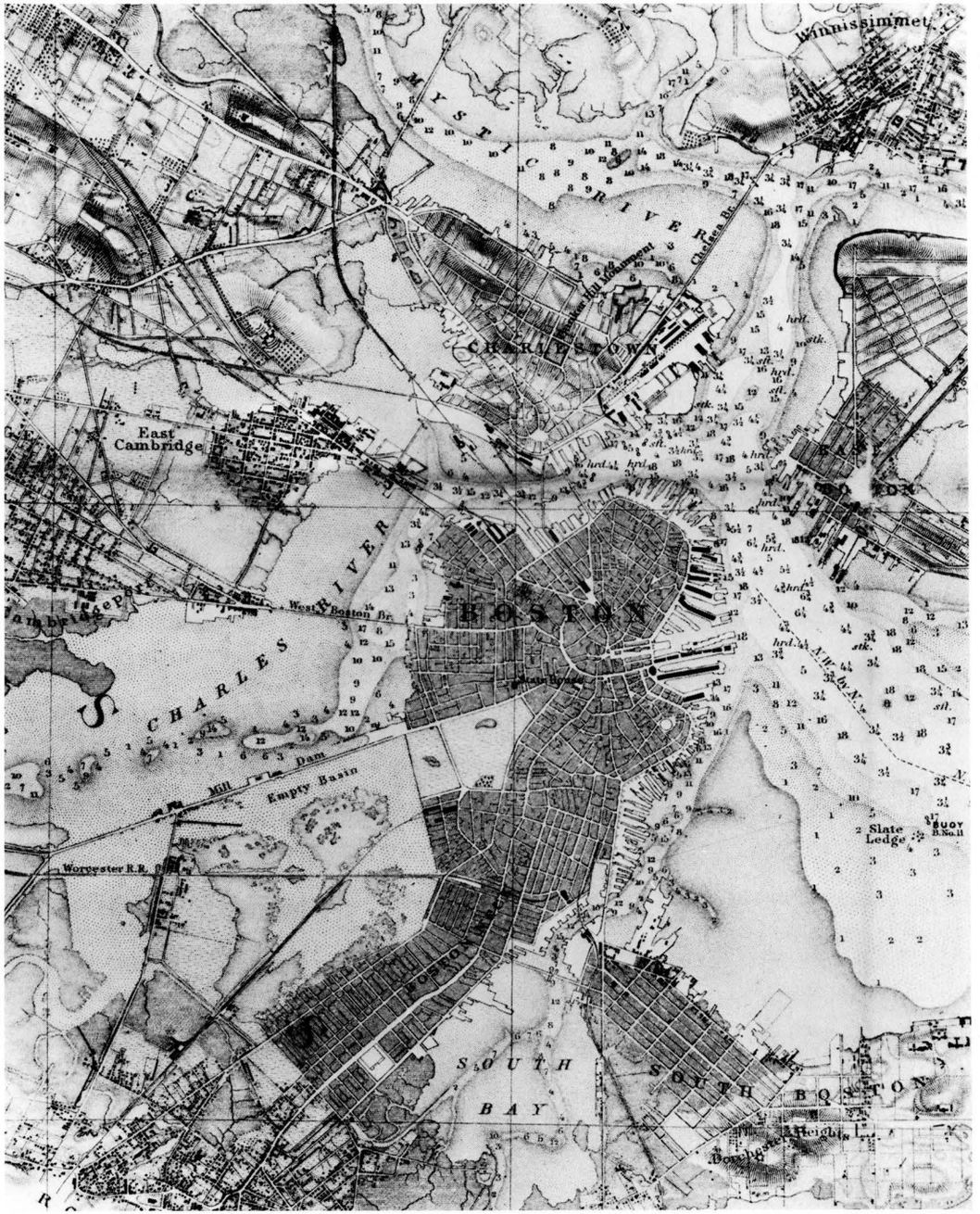
Transportation

The strategic location of East Cambridge opposite Boston is nowhere more clearly demonstrated than in its access to transportation (Fig. 118). From colonial times until the early 19th century, the rivers and creeks enabled small boats to reach many interior points. Since development required accessibility, this made East Cambridge a successful venture long before the Lower Port, which had been established earlier but was hampered by poor access to the navigable channels of the Charles River and by the long delay in opening the Grand Junction Railroad. Boston was surrounded by water, and Lechmere's Point was, after Charlestown, the closest high ground on the inland side of the Shawmut Peninsula. Among the outlying necks and islands of Charlestown, Lechmere's Point, Dorchester Neck, and Noodles Island, East Cambridge had a natural advantage because it lay between Boston and the inland towns.

Water Transportation

From the time of settlement until the closure of the Charles River Dam in 1908, the Charles River was a tidal stream that was fully navigable only at high water. A huge tidal basin opposite Cambridgeport separated Boston proper from Roxbury and Brookline, and another, smaller basin divided Lechmere's Point from Charlestown. The channel of the river was narrow and skirted the Boston shore, so that at low tide the river was navigable only to a point just upstream of the West



118. Charles River navigation channels, 1857

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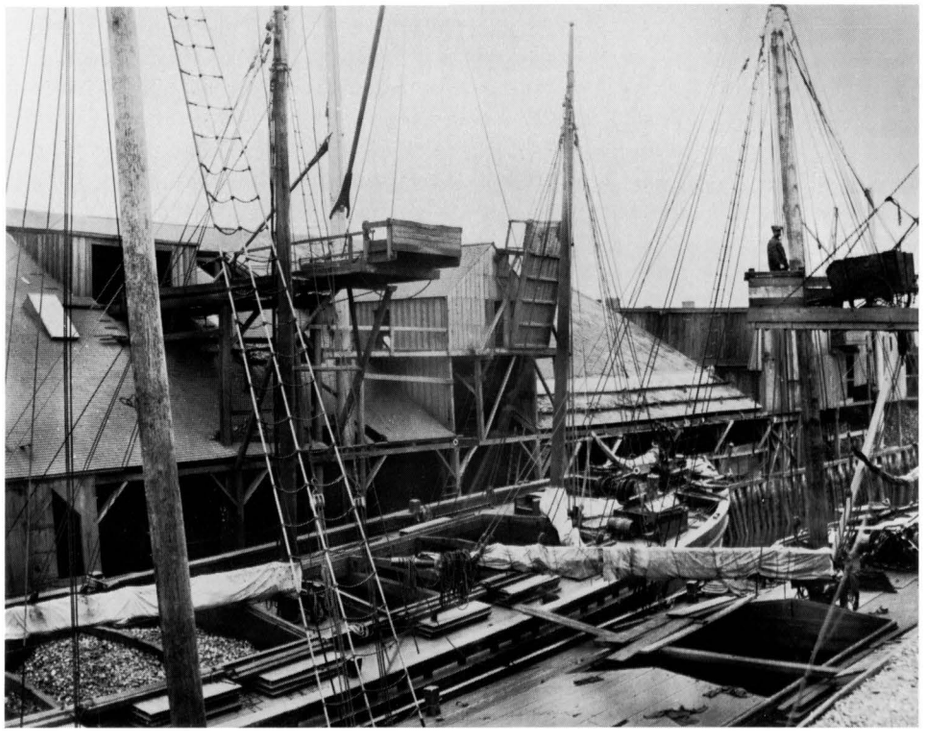
119. Ricker's stone wharf, Lechmere Canal, 1900. Boston & Lowell roundhouse in the distance



120. Unloading colliers, Broad Canal, 1899

Boston Bridge. At high tide, the river was navigable by schooner to Watertown Square and remained so until construction of the Longfellow Bridge in 1906. The entire Cambridge side of the river was a half-tide shore, with flats exposed much of the time and no deep water along the shore to float a ship at low tide. This impediment was not insuperable, however; coastal schooners, shoal draft vessels designed for such conditions, would wait in the channel for the rising tide and tie up to a wharf before the falling tide stranded them on the flats.

Navigation was more seriously restrained by the increasing number of drawbridges that obstructed the channel. As already noted, one condition of the charter for the Canal Bridge was that ship owners be compensated for each passage of the draw; by 1900 the eight highway and railroad bridges downstream were a real obstacle course. Nonetheless, as late as 1896 the Prison Point draw on the Miller's River opened 552 times, and the Canal Bridge draw opened 4,468 times.

Most of the waterborne traffic consisted of coastal schooners which carried raw materials consigned to East Cambridge firms. Cargoes were primarily coal from Baltimore and Norfolk, sugar from the Caribbean, lumber from Maine and the Maritimes, and granite from Cape Ann and the Maine coast (Figs. 119–120). Coastal shipping began to decline with the expansion of the railroad network after the Civil War. The lumber traffic began to shift to the railroads before 1890, but commerce in stone and coal was heavy well into the 1920s. Traffic on the Miller's River is thought to have ceased in the 1920s, when the West End Street Railway closed its generating plant and the Revere Sugar refinery moved to Charlestown, but the Broad and Lechmere

121. Wet storage of piles, Lechmere Canal, c. 1920

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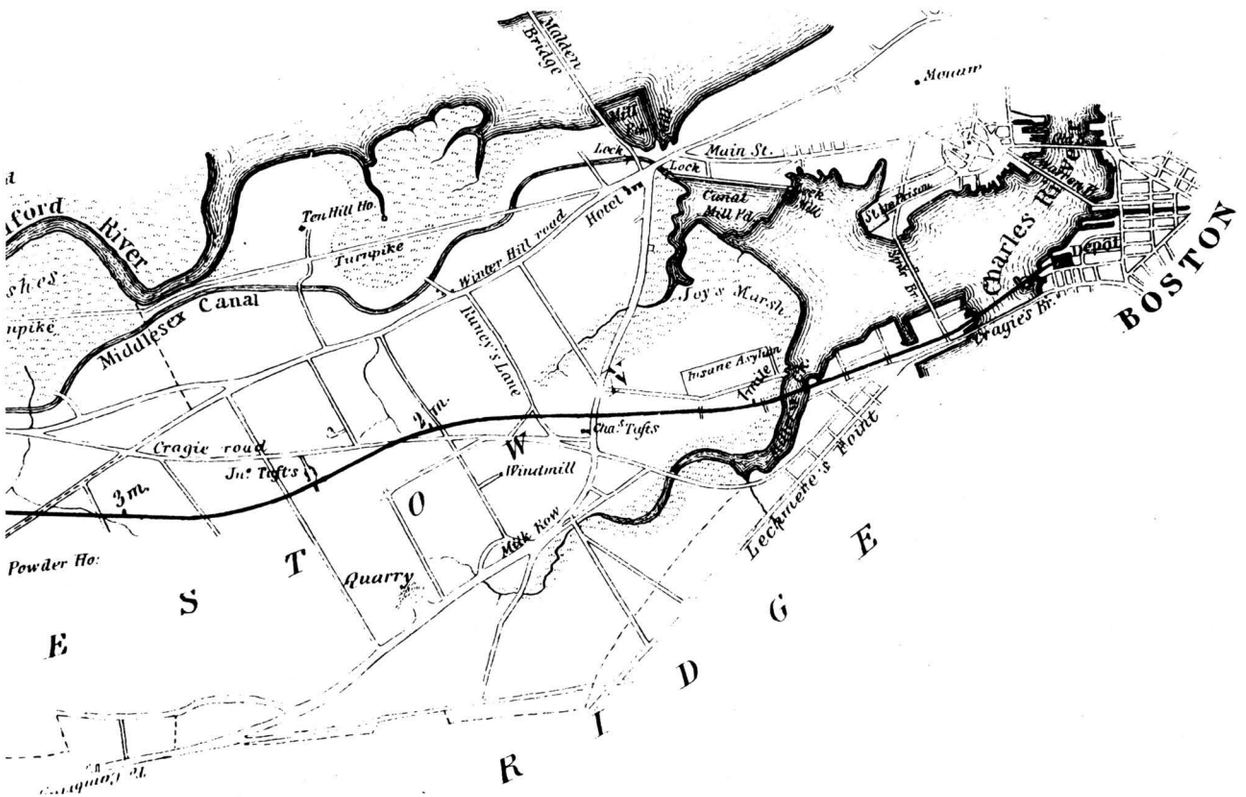
canals stayed in use much longer (Fig. 121). The Cambridge Electric Light Company's Kendall Station received oil by barge until 1985, but in 1988 the drawbridges on the Broad Canal were permanently closed, making further commercial navigation impossible.

The other mode of water transportation in the early 19th century was the Middlesex Canal, which extended 27 miles from Charlestown to Middlesex Village in Chelmsford, just upstream from the future site of Lowell. Incorporated in 1793 and completed in 1803, the canal tapped the forests and farms of northern Middlesex County and the Merrimack River valley as far north as Concord, New Hampshire. Passengers and freight were carried in canal boats, and logs were rafted (see Fig. 60).

The southern terminus of the canal was the Charlestown millpond, a tidal basin with a milldam at the head of the bay separating Charlestown from Lechmere's Point (Fig. 122). The dam and its mills had been established between 1670 and 1675 and were purchased by the proprietors of the canal in 1803. The millpond provided a basin for the canal boats, and rafts of timber could be stored behind booms below the dam. Provisions were made for freight boats to go through locks into the salt water of the bay; in the absence of a towpath, boats were drawn by hand across the Charles River by an arrangement of buoys and cables. On the Boston side, the proprietors maintained offices and shops on the Almshouse Wharf at the end of the Mill Creek Canal, which crossed Boston to the harbor. The construction of the North Canal between the Miller's River and the Broad Canal after 1811 may have been intended to provide a protected route to the canals in the Lower Port. Although one traveler tells of going to East Cambridge to board the packet boat *General Sullivan* for Chelmsford, there is only circumstantial evidence linking commercial traffic on the Middlesex Canal to the Cambridgeport canal system.



122. Miller's River Basin in 1832, showing the terminal facilities of the Middlesex Canal and the Boston & Lowell Railroad

The completion of the Boston & Lowell Railroad in 1835 meant the death of the Middlesex Canal. In 1843, the agent of the canal noted:

The year [the Lowell Railroad] went into full operation, the receipts of the canal were reduced by one-third; when the Nashua & Lowell went into operation they were reduced another third. Those of last year and the present will not be sufficient to cover the expenditures for repairs and current expenses. The future has but a gloomy prospect. (Clarke, p. 124)

Business continued to decline, and by 1852 the property had been sold and the canal closed.

Railroads

The immediate geography of Boston prescribed that railroads entering the city from the north make their approach across the bay separating Lechmere's Point from Charlestown. From the 1830s to the 1850s, seven companies laid tracks across the bay, intersecting each other's lines and dividing the flats into awkwardly shaped parcels. The manner in which this was done was determined by the immediate objectives of each company and was not part of any overall plan (Figs. 123–124).

The first railroad into Boston from the north was the Boston & Lowell, which was completed in 1835. It had the easiest route: skirting the south slopes of Central and Prospect hills in Somerville, the line bridged the Miller's River below the Barrell mansion to reach a temporary terminus in East Cambridge (see Figs. 63 and 122).

Soon afterward, the Charlestown Branch Railroad was chartered to run from the Boston & Lowell line just south of the Barrell house to the wharves in Charlestown via a trestle across the flats. This line

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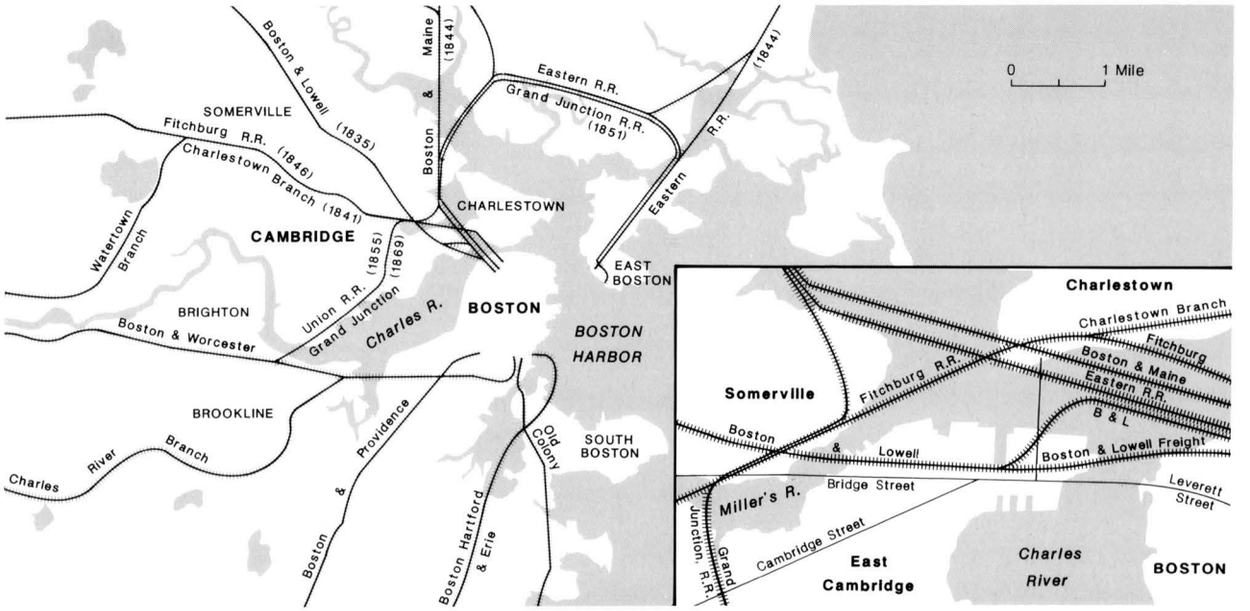
provided access to deep water shipping and became an important connection. In 1841, it was extended to Fresh Pond, yielding a great traffic in ice and brick from North Cambridge. In 1846, however, it was taken over by the Fitchburg Railroad as the nucleus of a route that eventually extended through the Hoosac Tunnel to Mechanicville, New York, and what had been a friendly connection of the Boston & Lowell became a competitive one.

The next railroad across the bay was the Boston & Maine from Portland via Haverhill, which in 1844 was built down the Mystic Valley and across Charlestown Neck, crossing the Charlestown Branch at grade near the Prison Point Bridge. This crossing was paralleled in 1854 by the Eastern Railroad from Portland via Newburyport, which had originally terminated in East Boston in 1838. All the companies had Boston depots, either on Causeway Street or in Haymarket Square, and all were in the possession of the Boston & Maine by 1900. Connecting all the northern lines was the Grand Junction branch of the Boston & Albany Railroad, the Boston & Maine's great rival.

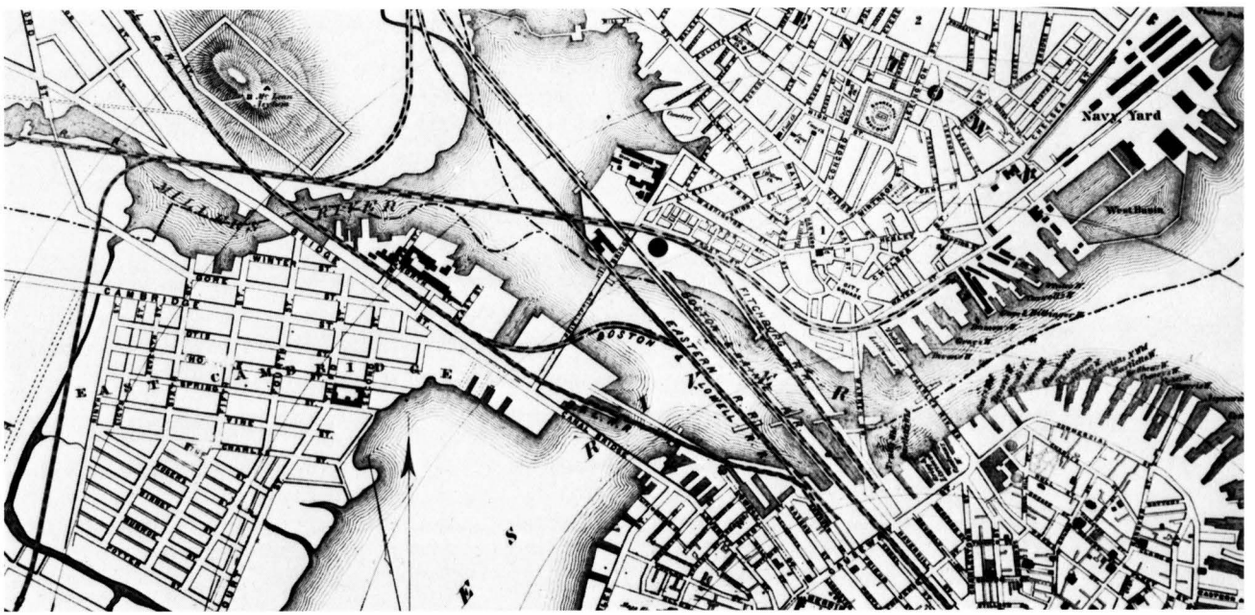
Together, these lines created a vast network of trestles, junctions, and engine terminals sprawled across the flats (Figs. 125–126). None of the routes was free of level crossings with another, a feature that impeded service well into the 20th century. Despite this profusion of railroads, East Cambridge was directly served only by the Boston & Lowell and the Grand Junction.

The Boston & Lowell Railroad was the first railroad chartered in Massachusetts, and it was given exclusive rights to operate a railroad between Boston and Lowell for thirty years. The railroad opened on June 24, 1835. For the first few years the terminal was in East Cambridge, at the Prison Point Bridge, although an act of 1832 permitted building a bridge from Boston across the Charles to Cambridge or Charlestown between the Canal and Warren bridges. The route was left to the discretion of the company; the only restriction was that it stay at least 100 feet away from the Prison Point and the Canal bridges. Later a station was established at the corner of Brighton and Leverett streets in Boston.

In 1847, the Boston & Lowell was authorized to construct a branch from East Cambridge to a new



123. Railroads entering Boston, 1830–65



124. Railroads entering Boston from the north, 1865

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125. Warren Bridge and Boston & Maine yards, looking toward East Cambridge, 1911

station on Causeway Street, but it did not do so. In 1853, it was again granted permission to construct a branch, either from East Street in East Cambridge to a bridge next to the Eastern Railroad or as an extension of the existing track along the waterfront to Traverse Street in Boston. The railroad chose the first route, and in 1857, after filling more flats in East Cambridge and throwing a second bridge across the Charles, it opened a new station on Causeway Street. The new route bypassed the East Cambridge passenger station on Prison Point Street, which was moved to Third Street. The old route was then used only for freight.

The Boston & Lowell provided a valuable link between the towns of Middlesex County and the county seat at Lechmere's Point. Beginning in 1835 with two round trips a day between Boston and Lowell at a fare of $1, it had expanded by 1851 to fifteen trains daily at a fare of 60 cents. The railroad's East Cambridge station was a simple one-and-a-half-story gable-roofed structure, with deep eaves supported by long, curved brackets that created a shelter for waiting passengers (Fig. 127). Tall, round-headed windows and paired doorways facing the platform were the most prominent features of the building. Five of its seven rooms served as living quarters for the station agent; the other two were separate waiting rooms for male and female passengers. Passenger trains stopped in East Cambridge until the late 1920s, when competition from the street railways caused service to be terminated; the station was demolished in 1928.

Architecturally, the most significant Boston & Lowell structure in East Cambridge was the first roundhouse, a castellated granite structure built in 1845 at the corner of the Canal and Prison Point bridges. Designed by George M. Dexter, it was similar to engine houses elsewhere on the line (Figs. 128–129). A second engine house was built just north of the first and was extended to shelter five additional locomotives in 1873. Farther north, a still larger engine house was built in 1886, just before the company was leased to the Boston & Maine. By this time, the railroad had also built a number of sheds for hay, lumber, and ice, as well as car and locomotive shops for its own use. All these were demolished by 1903 in an expansion of the freight yards, and a new roundhouse was built west of the Prison Point Bridge. This, in turn, was demolished after World War II; the present Boston Engine Terminal is in Somerville.

The Grand Junction Branch in Cambridge had a shaky beginning that belied the strategic role it was to play. None of the seven railroads that entered Boston by 1855 initially planned to interchange traffic, yet all wished to gain access to the deep water piers in South Boston, Charlestown, or East Boston. Of these locations, the most important in the 1850s was the Cunard wharf in East Boston, from which regular steamship service to Liverpool had begun in 1840. Of all the railroads entering Boston, the Boston & Worcester was most in need of deep water access.

The Grand Junction Railroad & Depot Company came into existence in 1846 as the Chelsea Branch Railroad. It was initially chartered to construct a line from the Eastern Railroad in East Boston to Chelsea. In 1848, it was renamed and authorized to cross the Mystic River into Somerville to interchange with other railroads there and to build piers on the 1.5 million square feet of flats it owned in East Boston. Both tasks were accomplished by 1851. According to the first annual report of the Grand Junction in 1848, the extension would provide a "perfect chain of communication between the Grand Junction Depot and all the interior railroads, extending through the manufacturing districts of Massachusetts, Maine, New Hampshire and Vermont, to both Canada and the Great West, over which the manufacturers and products of this vast extent of country will come to a shipping depot." The need to link the port in East Boston with New York, the West, and Canada was the chief reason that, as early as 1852, the Grand Junction sought to negotiate with the Union Railroad and the Boston & Worcester, with which the Union was to connect.

The Union Railroad was incorporated in 1848 to con-

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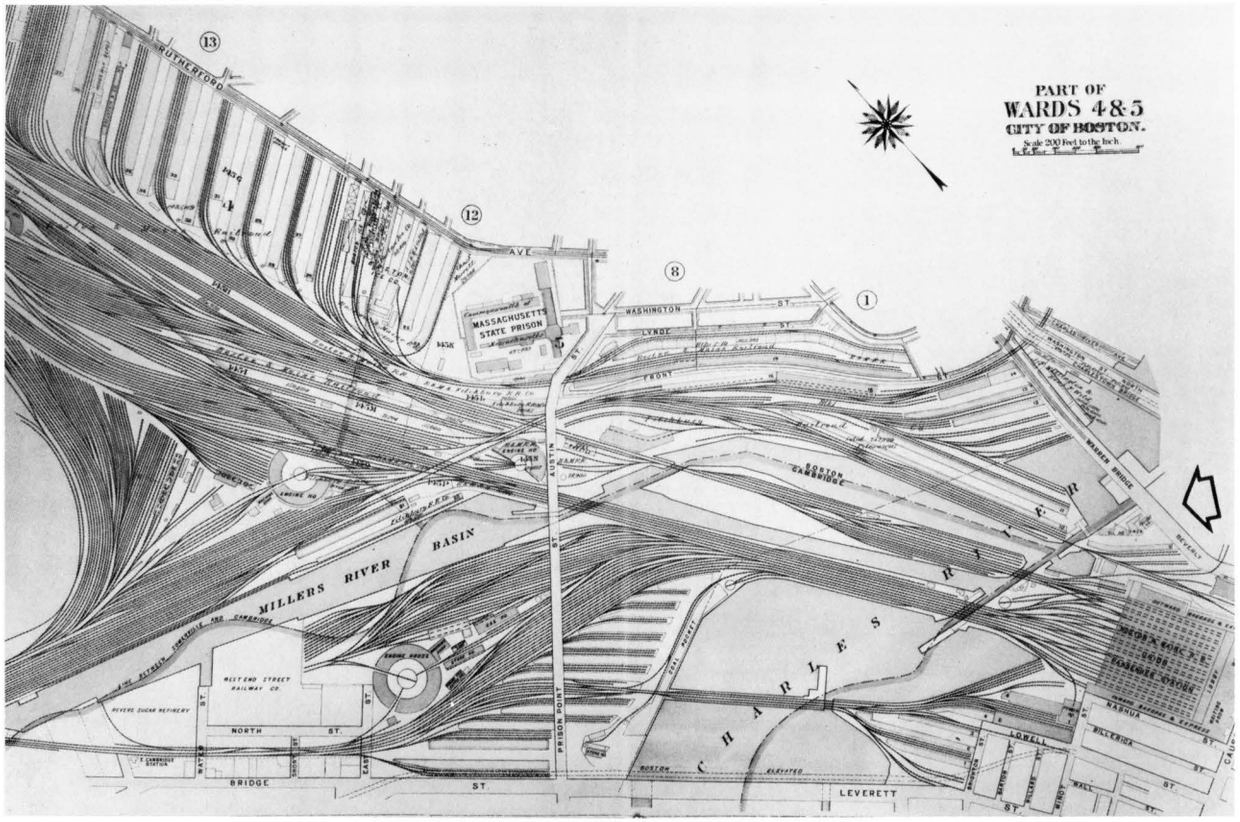

126. Miller's River Basin and Boston & Maine Railroad yards in Boston, Charlestown, and East Cambridge, 1912. The photograph in Figure 125 was taken from the point indicated.

127. Boston & Lowell Railroad, East Cambridge station, c. 1910 photograph

struct a line from Somerville to Brookline, starting on the Fitchburg Railroad near its junction with the Boston & Lowell. From there it was to run across the marshes on the western side of East Cambridge and along the Charles River to connect with the Boston & Worcester at Cottage Farm in Brookline. The incorporators, Isaac Livermore, Charles Davenport, and Newell Bent, represented interests in Cambridgeport. In 1853, the Union Railroad was authorized to lease its property to the Grand Junction Railroad, and the deadline for completing the line was extended to 1855.

The Boston & Worcester invested $100,000 in the Grand Junction in 1853. In return for helping construct the line through Cambridge and Somerville, the Boston & Worcester was to receive a lease of wharf facilities in East Boston. Service began in 1855, but only a short time later a storm washed out a bridge. The Grand Junction, deep in debt, was unable to make repairs and service came to a halt. The Boston & Worcester refused to resuscitate the company and went to court. Litigation dragged on until 1866, when a legislative act authorized the Boston & Worcester to take over the Grand Junction's franchise and properties. A merger of the Boston & Worcester and the Western railroads took effect in 1868 and created a new corporation, the Boston & Albany Railroad. It at once relaid the Union tracks and began operations in 1869. Later, the Boston & Albany built a freight house on Binney Street and laid spur tracks along Rogers Street (1876) and Munroe Street (1909) to service factories directly and to encourage industrial development south of Charles Street (see Fig. 414). The Grand Junction Branch became the only practical connection between the railroads north and south of the city, and it remains so today.

While the Grand Junction Branch never carried passengers, its importance as a freight line cannot be overestimated. The volume of trains seems unbelievable today, but in 1901, during a movement to separate all the grade crossings in the city, it was found that on a typical day, Cambridge Street was blocked for 63 minutes by 42 trains totaling 523 cars (Fig. 130). Today, there are no shippers left in East Cambridge, and trains are infrequent.

Omnibus Lines and Street Railways

The evolution of Bridge and Cambridge streets into main highways between Boston and the interior towns gave East Cambridge a strategic position when public transit systems developed in the 1830s. While relatively few routes originated in East Cambridge, the area benefited from frequent service on lines between Boston and Old Cambridge and later, Somerville and Medford. When the street railroads were electrified in

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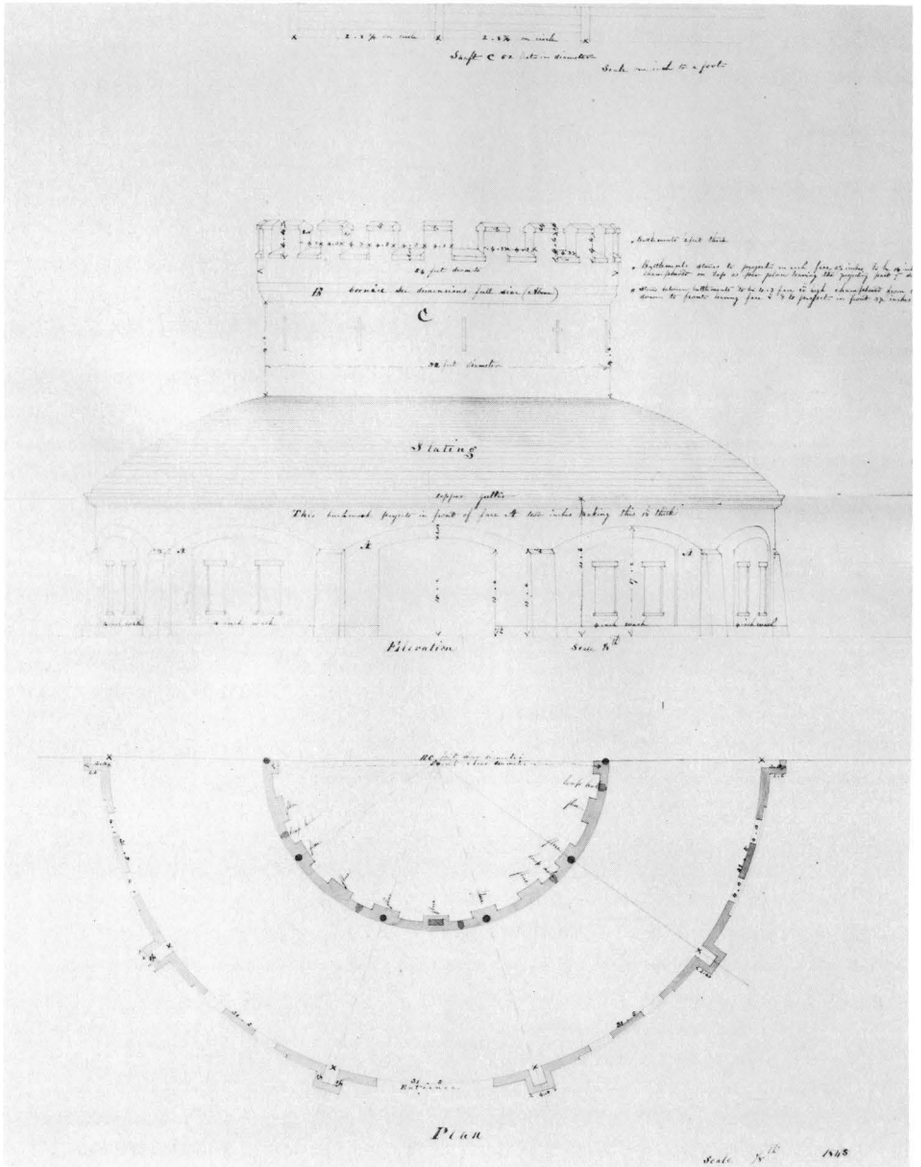
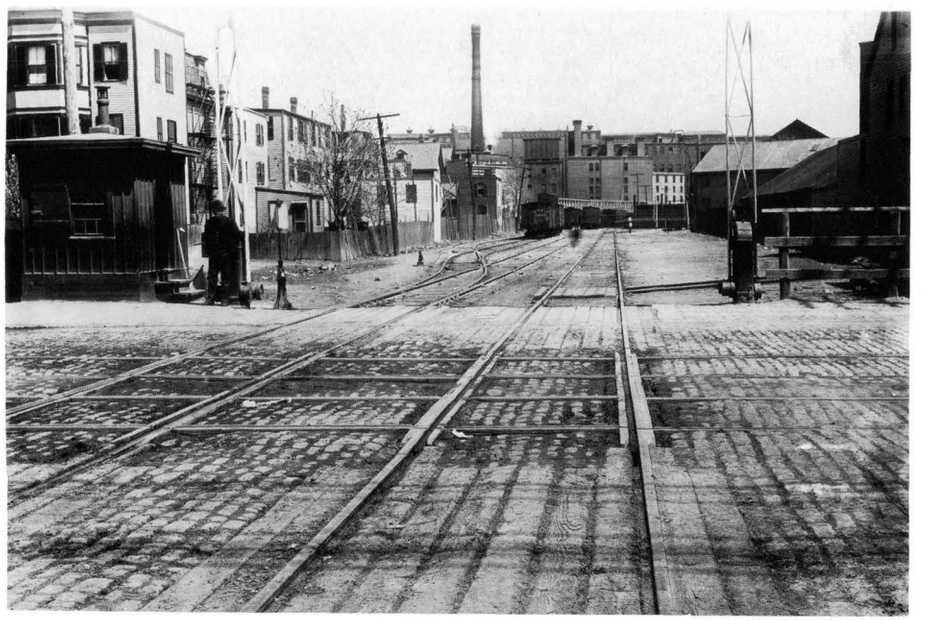


128. Boston & Lowell Railroad roundhouse, 1854, original plans by George M. Dexter

129. Boston & Lowell Railroad roundhouse, Prison Point and Bridge streets, 1900 photograph



130. Grand Junction Branch, looking north from Cambridge Street, c. 1910

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131. East Cambridge horsecar in Harvard Square, c. 1865

the 1890s, the lines were extended to more distant towns. Traffic became so heavy by 1910 that streetcars were segregated from road traffic by a viaduct parallel to the Charles River Dam. In the 1880s, East Cambridge was also the site of a daring experimental steam-powered monorail, which its promoter, Joe V. Meigs, hoped to convince Boston to adopt for its transit system.

Four factors influenced the development of public transportation from omnibus to trolley: speed, capacity, comfort, and cost. An omnibus progressed at about 5 miles per hour, carried up to 20 people, and charged between 2½ and 15 cents. Horsecars charged between 2½ cents and 12 cents, ran at 7 or 8 miles per hour, and carried up to 48 people; they were better ventilated and considerably quieter than omnibuses. Electric cars were well heated and lighted, ran at 13–15 miles per hour, carried 90 passengers, and charged a standard 5 cents. The early electric cars were extremely noisy and caused many complaints from home owners. Each advance in the time-distance-cost relationship affected the population mix of every area served. New lines opened up suburban housing opportunities for the economically successful, and lower fares allowed workingmen to ride rather than walk.

Omnibuses were the first vehicles designed specifically for local service. They evolved from "hourlies," stagecoaches run over a short distance between urban centers. Before the introduction of hourlies, which first ran in Cambridge from Harvard Square to Boston in 1826, long-distance coaches, private carriages, and walking provided the only means of getting about. The early omnibuses resembled elongated stagecoaches, but with a rear door and seats placed along the sides instead of crosswise. When additional seats were provided on the roof, the total capacity was about 20, compared to 9 in a coach.

The first hourly to run from Old Cambridge through East Cambridge was that of Ebenezer Kimball, who carried the mail. Begun in 1830, the coach ran every other hour five times a day and was announced by a post horn, the same signal used for long-distance stages. In 1831, East Cambridge was linked to Cambridgeport by Mark Bill's hourly, which ran six times a day. Also in 1831, the first line originating in East Cambridge began operation when William Mansize purchased a small coach from Kimball for a route from Lechmere's Point to Boston. This line was subsequently bought by Ebenezer Pratt, John and Moses Kimball, and A. Studley, and in 1839 by John L. Boynton, who ran it until a horsecar began operation in 1859.

In 1846, Boynton started another line from the Lechmere House to Boston's City Hall, running every hour instead of every other hour. By 1852, Boynton had six two-horse coaches and made trips every half hour. He lived at 115 Cambridge Street and until 1854 kept his office on Cambridge Street opposite what was then the Universalist church between Third and Fourth streets. His omnibuses were named Metamora, Nameokee, Vesuvius, and Etna.

By the end of 1852, an omnibus ran every two hours from Harvard Square down Cambridge Street and over Craigie's Bridge to Boston. The Cambridge Street route provided a direct connection between the First

132. Union Railroad carbarn, 619 Cambridge Street, 1869, architect unknown. Photograph 1899

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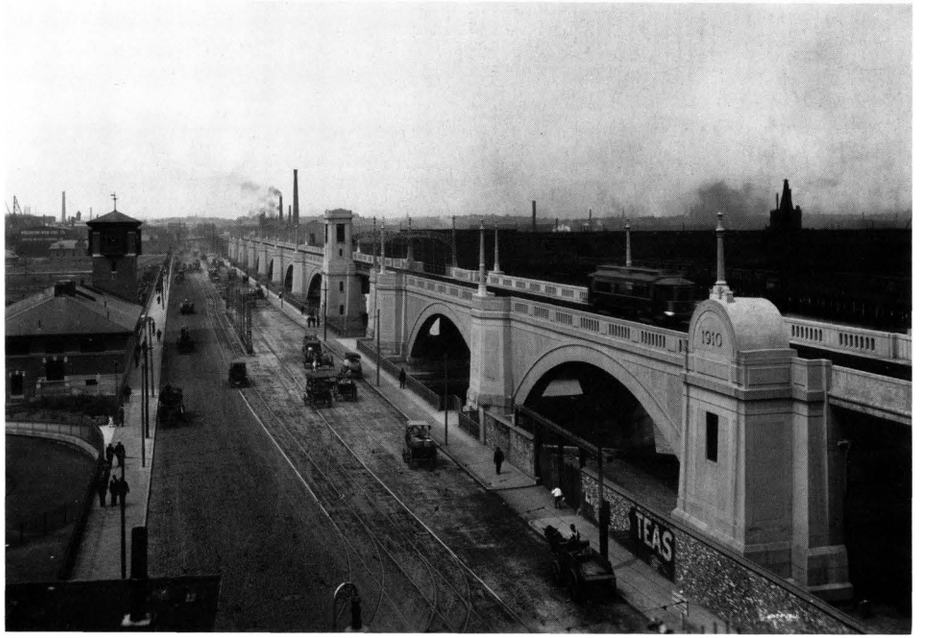
133. West End Street Railway car 1414, on Cambridge Street, c. 1910



134. East Cambridge viaduct and Charles River Dam, c. 1912

and the Third wards and access from Harvard Square to the courthouse.

In spite of their convenience, the omnibuses did have drawbacks. The 10-cent fare proved too expensive for the average workingman, and the toll on the bridge kept the fare high. Omnibuses were also vulnerable to the weather and to poor road conditions.

These difficulties were solved by the introduction of horse-drawn cars running on tracks. The horsecar combined the speed, smoothness, and all-weather capability of a railway vehicle with the low cost, safety, and flexibility of an omnibus. This innovation increased ridership from the hundreds to the thousands and made the omnibus virtually obsolete.

Cambridge followed only New York, New Orleans, and Paris in introducing horse-drawn street railways. In 1853, the Cambridge Railroad Company was incorporated by Gardiner G. Hubbard, Charles C. Little, and Isaac Livermore to provide horsecar service in Cambridge, but its funds were inadequate to equip the road. In 1855, the Union Railway Company (not related to the Union Railroad) was incorporated, and it leased the Cambridge line. By 1856, horsecars ran from Old Cambridge to Boston via today's Massachusetts Avenue and Main Street over the West Boston Bridge. Not until 1859 did horsecars reach East Cambridge, when a branch was opened on Court Street (now Third Street) to Dock Square. The company hoped to run a direct line from East Cambridge to Boston by way of Bridge Street and Craigie's Bridge but had difficulty in obtaining permission for the Boston end. A Cambridge Street line opened soon after, with service from Harvard Square (Fig. 131). By 1866, a track had been laid over Craigie's Bridge and the Third Street track removed by order of the Board of Aldermen. In 1874, a new track was laid along Third Street to guard against a blockage on either bridge, but it did not see regular service until 1885, when Somerville cars began to run over it to Charles Street in Boston.

The car barn constructed at 617 Cambridge Street in 1869 is an important survivor of this period (Fig. 132). Although the first floor has been altered by a storefront, the building remains relatively intact.

Apparently horsecar service in the 1870s was not all that it could have been, and in 1874 one of the incorporators of the Union Railway, J. C. Stiles, started a competing omnibus service with four coaches called the People's Line of Coaches. Although omnibuses had generally gone out of use years before, by 1876 Stiles was running a coach every ten minutes from Eighth Street in East Cambridge to Summer Street in Boston. By 1878, he operated twenty coaches and two barges and charged 5 cents. To meet this competition, the Union Railway improved the frequency of its service, the cleanliness of its cars, and the civility of its underpaid conductors. In 1879, it advertised fare reductions from 6 to 3 cents for People's riders. This policy applied only to the East Cambridge line, evidence that the Union was trying to drive People's out of business. Stiles managed to stay in business until 1883, when he

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135. Lechmere terminal under construction, 1922

sold his operation to John Cassidy of Watertown. Stiles continued as superintendent, but within a few months the entire stock of sixty-seven horses, fifteen coaches, and four barges was sold at auction, and the horsecar once again became the dominant mode of transportation in East Cambridge.

In 1887, the Cambridge Railroad, as the Union Railway had been renamed in about 1884, became part of the West End Street Railway, and the electrification of the horsecar routes began in 1889 (Fig. 133). In 1894, the West End was absorbed by the Boston Elevated Railway, which was charged with developing rapid transit in the Boston area. Craigie's Bridge was identified as a major choke point, and it was determined to construct an elevated line in conjunction with the new Charles River Dam.

The electrified East Cambridge routes continued unchanged until 1912, when a high-level viaduct parallel to the Charles River Dam permitted uninterrupted travel between Lechmere terminal and North Station. Designed by Peabody & Stearns to provide a strong visual closure to the Charles River Basin, the viaduct incorporated a drawbridge over the locks to allow schooners up the channel (Fig. 134). At first, all routes from the north continued over the viaduct to the Boston subway, but in 1922 the Lechmere terminal became a transfer station, ending direct service to Boston along Cambridge and Bridge streets (Fig. 135).

Beginning in 1936, the Cambridge Street service was replaced by trackless trolley buses; the Somerville routes were converted in 1941. Trackless trolley service continued in East Cambridge until 1963, with loops on Gore and Third streets from the Msgr. O'Brien Highway. Since then, streetcar service has continued on the Green Line to the Lechmere terminal. The present plans are to move the Lechmere station to the north side of the highway, in part to accommodate a possible extension of service into Somerville along the former Boston & Lowell line.

The Meigs Elevated Railway

An unusual experiment in public transportation took place in East Cambridge when a monorail line was erected by Josiah Vincent Meigs in 1885–86 on the grounds of the former Bay State Glass Company and on open land behind Squire's meatpacking plant. Meigs was born in Tennessee in 1840 and spent his life inventing and patenting a variety of devices, from a breech-loading gun to special furniture. His lifelong interest, however, was in developing a safe and improved railway system, an invention that became the Meigs Elevated Railway.

By the age of fourteen, Meigs was already experimenting with railroad technology and had developed a new railroad car coupler. His determination to design an improved railway system increased after he was involved in a railroad accident while an apprentice on the Memphis & Charlestown Railroad in 1860.

In 1866, Meigs moved to Lowell to work under the patronage of General Benjamin Butler. Although his main job was to develop a breech-loading gun for Butler's U.S. Cartridge Company, Butler also supported his work on other inventions. When Meigs applied for his first railway patent in 1873, he had already been working on the project for six years.

The Meigs Elevated Railway emphasized safety, comfort, and convenience. The track structure consisted of two rails, one mounted above the other on a line of supports (Fig. 136). This single post system removed four fifths of the structure that darkened streets beneath other elevated systems. One pair of wheels angled at 45 degrees carried the weight of the engine, tender, and cars; another pair mounted horizontally inside the locomotive gripped the upper rail and provided the driving power (Figs. 137–138).

Accidents could occur in the Meigs system only if trains collided on the same track. In an emergency, the engineer could reverse the engine to augment normal

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braking and individual cars could be detached by the flip of a valve. Each car also had its own independent braking system to break the force of a collision. The locomotive had a buffer extended by an air spring instead of the traditional cow catcher, and the cars were lighter, thereby reducing momentum. At the moment of collision, couplers locked down the ends of the cars, and the floors, platforms, and braces were reinforced to resist damage. Finally, the locomotive was controlled from a raised compartment where the engineer could both see the way and communicate with the crew.

The cars, like the engine, were cylindrical to diminish wind resistance and stresses. The interiors were lined with panels of fireproof material. Seventy-two upholstered seats were arranged as in a parlor car and moved independently, revolving and folding up to gain floor space for packages. The seats could accommodate 33 percent more passengers than a horsecar, with 2 inches more room per seat per passenger.

Meigs wanted his system to give workers a maximum commute of fifty minutes. Ten minutes each were allowed from home to the train and from the train to work, and no more than thirty minutes were to be spent on the train. Trains would operate at 20 miles per hour. By having 2.5 stops per mile, the maximum walking distance was reduced to .4 mile. Such a system would allow the worker to live in the suburbs and commute easily to work.

Massachusetts railway law required that a charter be approved by the General Court and locations approved by individual city councils before construction could begin. In 1880–81, Meigs presented his models and charter to the House, but the Senate refused to hear him. Undaunted, he returned the following year. Finally, in 1882–83 he gained the support of the House, but not the Senate. Many factors frustrated his attempts: lack of financial support, negative testimony from other railways, and sentiment against Butler.

Meigs gathered 64,000 signatures in support of his system. At last, on March 18, 1884, his charter passed, authorizing a railway between Bowdoin Square in Boston and Cambridge. But its conditions were so stringent that they made it virtually impossible to implement the project. The most detrimental sections were those requiring the erection of a test track and the payment of all capital before construction began. Equally devastating was the financial panic that struck two months after he received his charter.

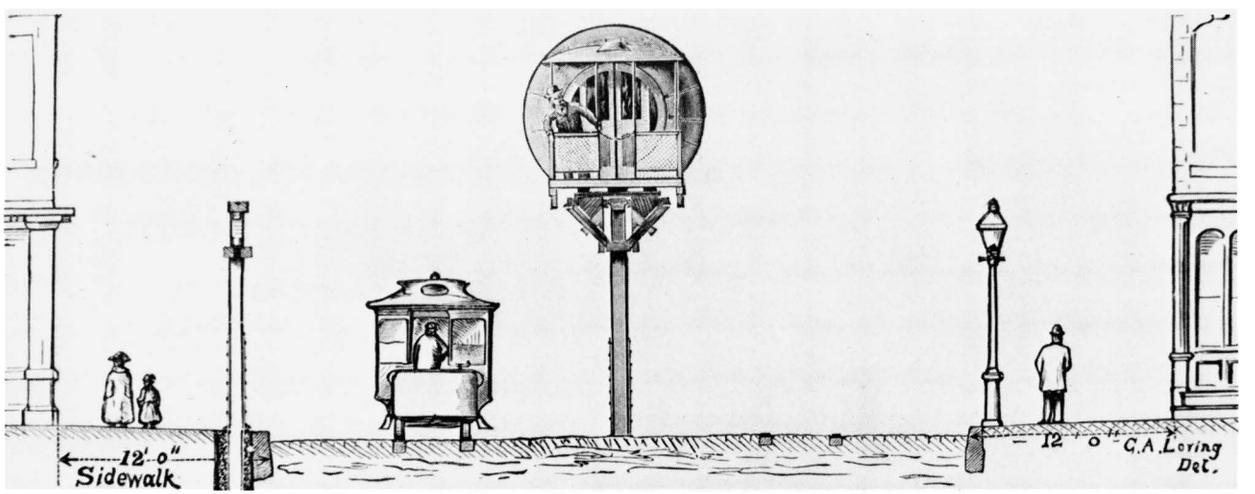
In order to encourage capital investment and to fulfill the terms of the charter, Meigs and his friends formed the Meigs Elevated Railway Construction Company, with headquarters at 225 Bridge Street in East Cambridge, and raised $200,000 to construct an experimental track. The railway laws allowed city authorities to determine the location, gauge, grade, and speed of any street railway wishing to use its streets. As early as November 9, 1881, Meigs had petitioned the Cambridge aldermen for a location in Cambridge.

John P. Squire became a major stockholder in the company and donated a plot of undeveloped, filled land between the Boston & Lowell Railroad and his slaughterhouse to build the experimental track. Meigs was delighted to test his railroad on filled land to prove the train's feasibility. Although the charter required a mile of line to be built before a location in Boston could be obtained, only 1,133 feet were deemed necessary to test all the monorail's possible construction problems. One of the first plans showed a quarter-mile track that ran parallel to Bridge Street, then crossed the street at the Somerville line to form an oval behind Squire's packinghouse. This layout was not built, possibly because it did not test the train's turning capabilities, and a more complicated scheme was followed.

The track as built consisted of 227 feet of level line parallel to Bridge Street that abruptly met a grade of 120 feet to the mile on a horseshoe curve with a 50-foot radius. This was followed by a 55-foot section with abrupt grade changes every 11 feet to 60, 120, 180, 240, 300, and 345 feet per mile. Meigs claimed this section alone would destroy an ordinary engine. At the steepest grade, the track made a quarter circle of 50-foot radius, then continued over two long spans of 46 and 22 feet that rose 3 feet in each length. The track continued over Bridge Street and went another 275 feet on level ground to a safety bumper (Fig. 139).

On October 27, 1886, the engineer George Stark, an "unbiased non-resident," was appointed by the Board of Railroad Commissioners to examine the safety and strength of the line. After two months of testing, Stark found the system to be both practical and safe.

Just as Meigs' hopes were rising, on February 4, 1887, an arsonist set fire to the passenger car in the shed. Only the wheels and the floor survived. Meigs began to rebuild immediately, placing temporary seats on the car floor so that the demonstrations could continue.



136. The Meigs system on a city street

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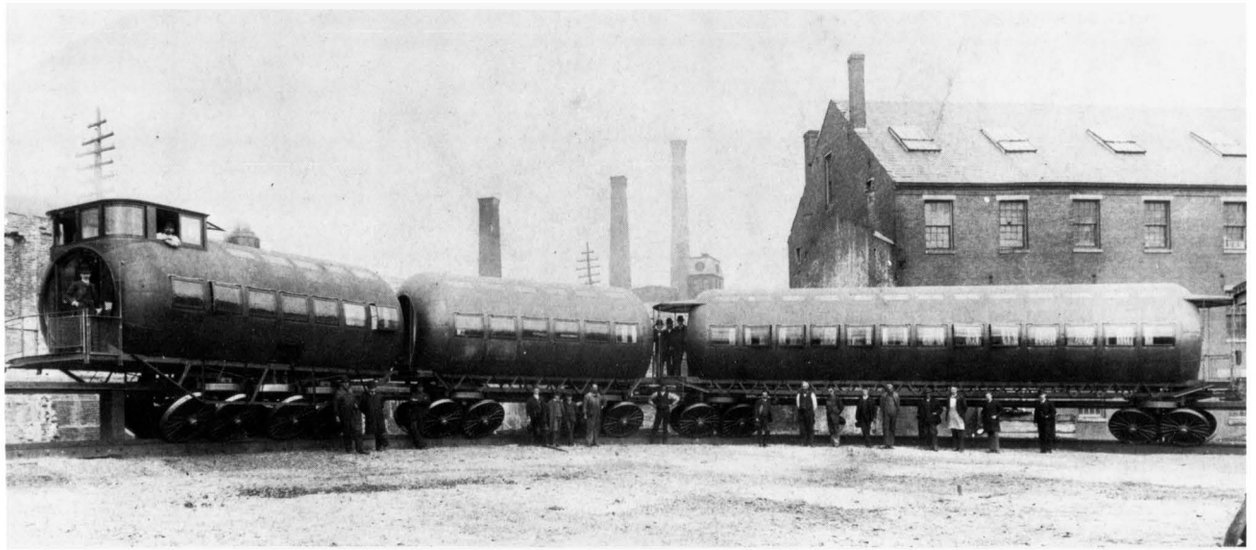
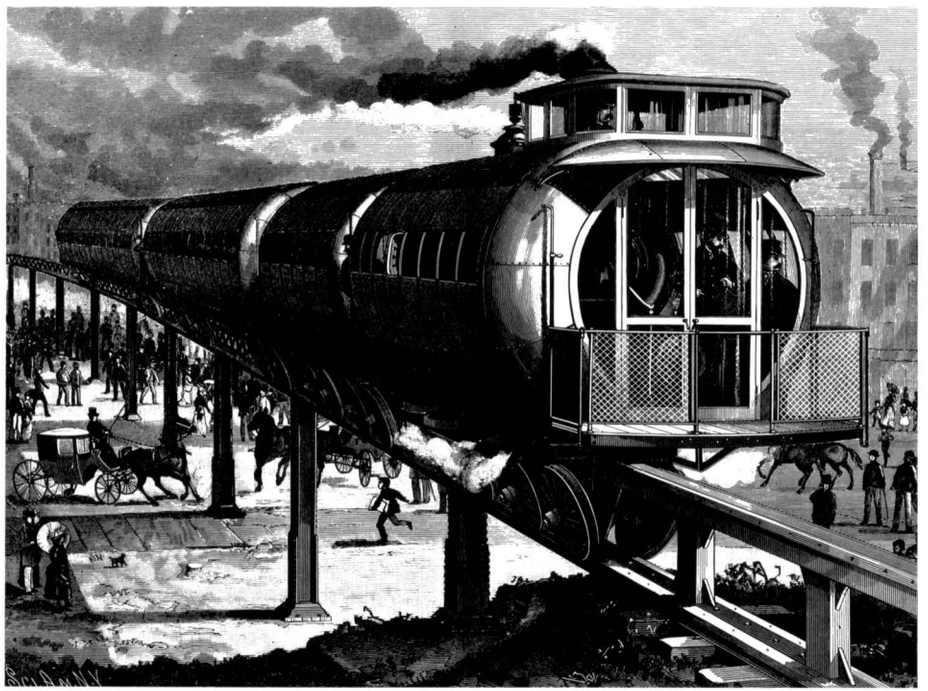


137. Meigs engine and cars, c. 1886



138. The Meigs system

On March 30, 1887, the Cambridge Board of Aldermen granted Meigs a route from Bent Street to Ninth, Portland, and Main streets. The purpose of this route is not clear, and it was never built.

Unable to sell enough stock to raise the necessary capital, Meigs returned to the legislature in the spring of 1887 to have the charter amended to reduce the required 100 percent of capital stock to the usual 10 percent. The only positive result of the amendment, passed on May 19, 1888, was an extension of two more years in which to incorporate the railway (Fig. 140).

Ironically, it was neither capital nor legislation that finally sank the Meigs elevated railway, but the coming of electricity. The West End Street Railway began electrifying its routes in January 1889. Although the monorail could have been adapted to electric power, Meigs believed electricity was too expensive and could not provide the speed the system needed.

The next several years brought more setbacks for Meigs. On June 3, 1890, his system was recognized as one that could be used by any city or town in the commonwealth. On July 2, however, the West End Elevated Railway bill was passed, putting it in direct competition with the monorail. Vandalism to Meigs' cars continued during 1892 and 1893, and on April 27, 1894, the monorail made its last run. The experimental track was torn down to make way for a railroad siding.

A last ray of hope glimmered for Meigs on July 2, 1894, when the Boston Elevated Railway was incorporated to construct a rapid transit system on Meigs' plan or any other except that operating in Manhattan, which employed conventional steam-powered trains on a double elevated track. Meigs, stubborn and in a manner antithetical to his usual forward-looking approach, still insisted on steam and could not raise the necessary capital. In 1896, several major West End stockholders, who had leased their line to the Boston Elevated, purchased Meigs' franchise to extinguish his rights to operate in Boston. In 1897, the legislature amended the act of 1894 to allow the Manhattan elevated system, which was ultimately adopted, making Boston's narrow streets dark and congested — an effect that Meigs had hoped to avoid with his monorail.

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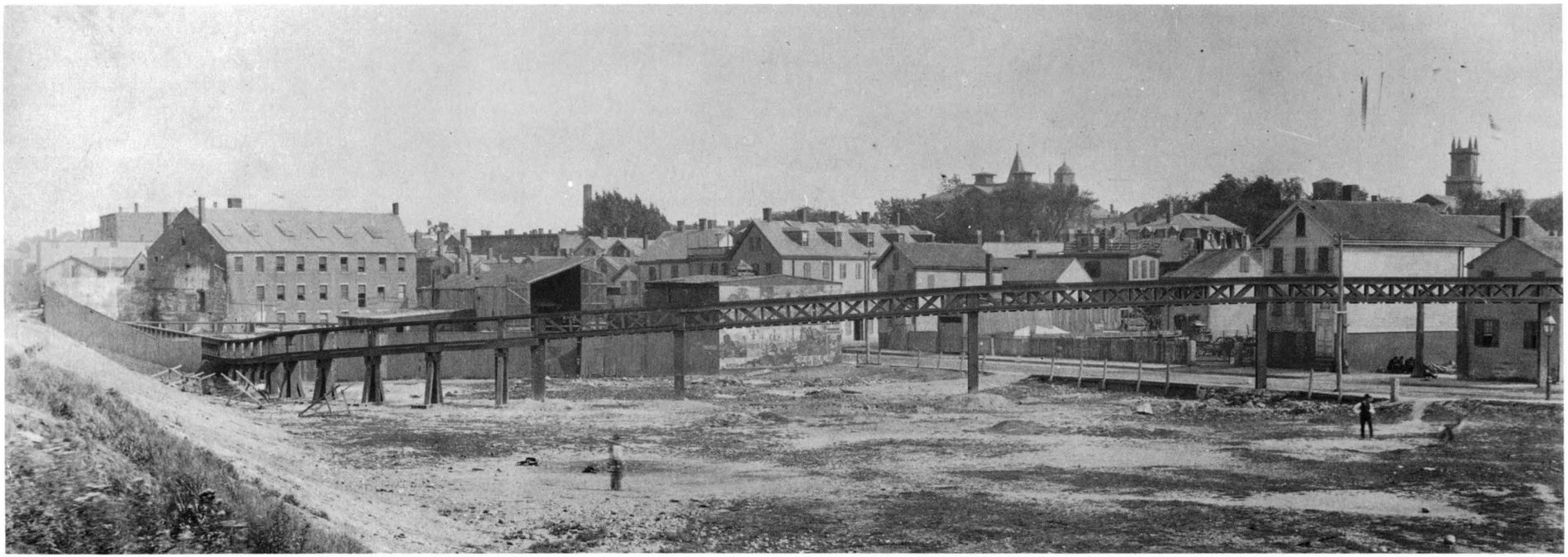
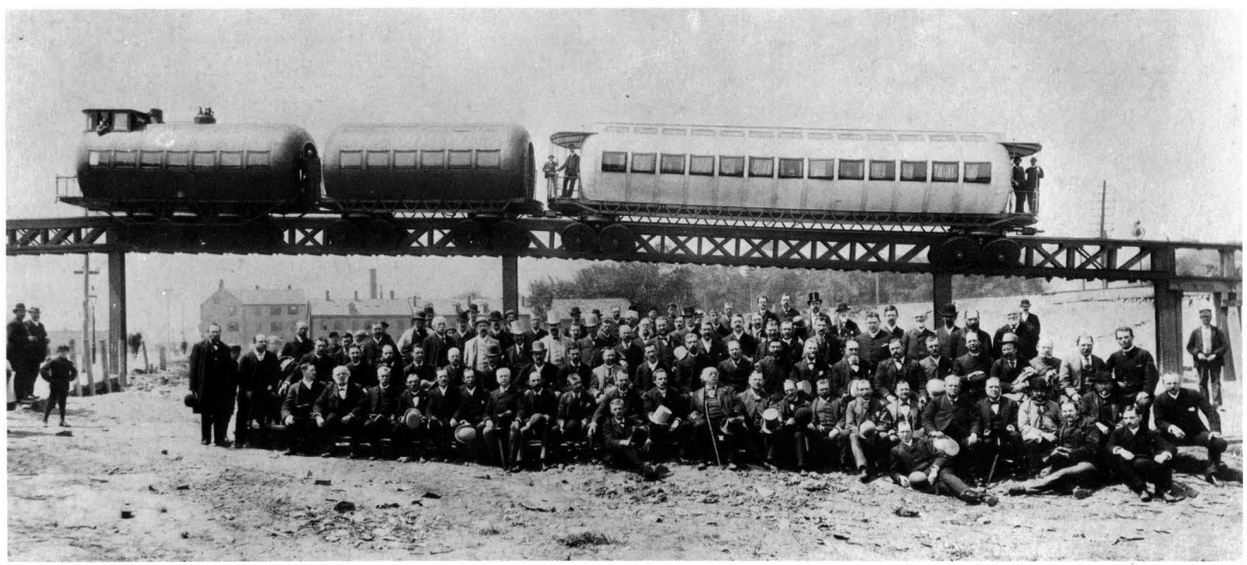


139. Meigs Elevated Railway, looking east from the Boston & Lowell embankment toward the shops and carhouse, with Bridge Street at right



140. Reception for the Philadelphia City Council, 1887

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141. East Cambridge in 1947. Spring Street in foreground; Fifth Street at left; Northern Artery at top

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II

Residential Architecture

Nearly all houses in East Cambridge date from the 19th century, principally from 1820 to 1875. During this period Americans built in a variety of styles, but beneath the stylistic trappings the building tradition, at least in East Cambridge, remained conservative. Because the area was settled near the beginning of the century, the earliest house plans and basic forms, as well as the earliest styles, reflected 18th-century building practices. Houses were built in all the popular 19th-century styles until after the Civil War, but East Cambridge is particularly noted for its abundance of fine Greek Revival houses dating from the 1820s to the 1840s. By 1879, houses filled the main residential streets, so that the area has almost no examples of the Queen Anne and Colonial Revival styles that were so popular in other parts of Cambridge. After 1880, utilitarian, multifamily buildings with few stylistic features dominated residential construction.

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19th-Century House Types

Throughout most of the 19th century, East Cambridge built only three basic house types, all survivals from the 18th century. An understanding of these types and the ways in which they were used provides a base for studying East Cambridge's residential styles.

The three principal house types at the beginning of the 19th century, when East Cambridge began to develop, were a four-room center-hall plan (Type A), a two-room center-hall plan (Type B), and a side-hall plan (Type C) (Fig. 142).

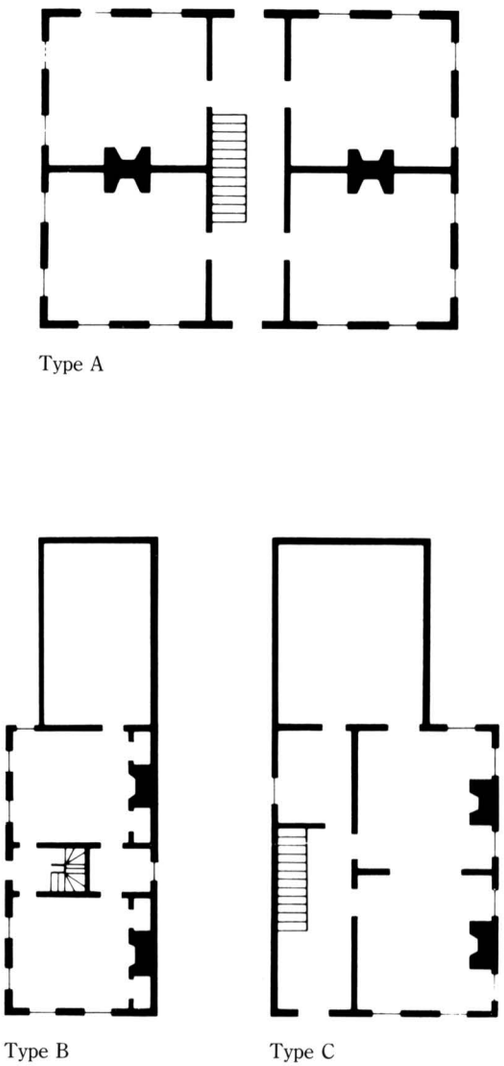
Type A was a continuation of the large 18th-century Georgian house, variations of which were built all along the Eastern seaboard (Fig. 143). Four-square and box-like in mass, this house was rigidly formal both inside and out, a heritage of the English Palladian tradition. The facade, oriented about a central, axial entrance, had five openings per floor (center door and four windows on the first floor, five windows on each of the upper floors). The plan consisted of four more or less square rooms per floor — two on each side of the center stair hall, which extended to the back of the house. Fireplaces were either on the outside wall (in which case there were four chimneys) or in the partition between the rooms (two chimneys). Sometimes subsidiary wings were attached to the side or rear, served by their own chimneys.

Type B, also surviving from the 18th century, was a smaller version of the center-hall plan (Fig. 144). It can be seen as a halving of the four-room model parallel to the front elevation; the same symmetrical five-opening facade was there, but the house was only one room deep. The stairway in the entrance hall generally had three runs (two changes in direction), so that it could fit into the relatively confined space. The two principal rooms (each with a fireplace on the rear wall) flanked the entrance hall, and an ell to the side or rear took care of services.

Type C can also be seen as a halving of the four-room center-hall plan, this time with the division made perpendicular to the front elevation (Fig. 145). Originally it was exclusively an urban type — the standard town house of Georgian London transplanted to the colonies. The facade had three openings per floor: a door and two windows on the first floor, three windows on each of the upper floors. The entrance at the side of the facade led into a long stair hall, off which opened the two principal rooms. Either one chimney was placed between these two rooms (providing each with a fireplace) or two chimneys were placed on the outside wall. Nearly always, an ell extended to the rear.

The freestanding four-room center-hall house (Type A) was the most coveted, but it was large and expensive to construct, and few were built in East Cambridge. It remained the ideal, however, inspiring numerous groupings of the other two types in pairs or rows.

Type B houses in East Cambridge were nearly always built with the narrow end to the street and with the symmetrical entrance facade facing the side of the lot. The earliest examples, from the 1820s, often had low hip roofs, but in the Greek Revival style, beginning in the 1830s, gable roofs were used exclusively. The type was at its apogee in America in the Late Georgian or Federal period; by the 1830s and '40s, it was used only for the most vernacular examples. Thus, Type B houses in East Cambridge are the smallest, least architectural of all the types. The small, free-standing, end-to-street version of the type is called in this book the worker's cottage, because it represents the simplest level of single-family housing during the first half of the century. Whole series of these worker's cottages still exist, particularly along Winter Street, punctuating the streetscape with their jagged silhouettes, which vary from one and a half to three stories high (see Fig. 167).



142. Single Family House Plans. Type A: Four-room center-hall plan; Type B: Two-room center-hall plan; Type C: Side-hall plan

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143. Type A, 467 Cambridge Street, 1824–25. Photograph 1964

144. Type B, 42A Lopez Avenue, c. 1825. Moved, original location unknown

145. Type C, 74 Otis Street, c. 1845

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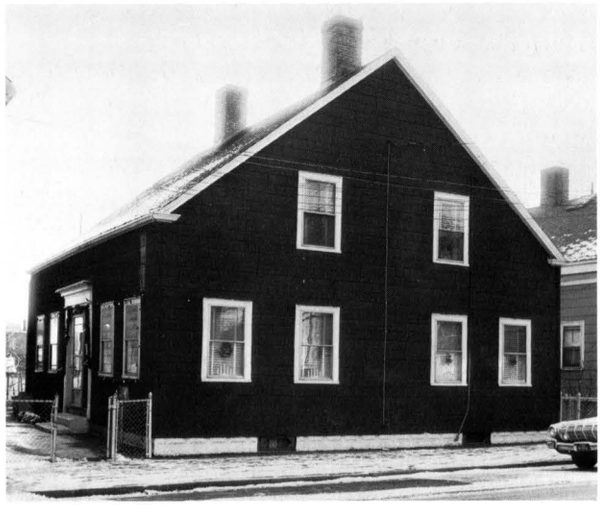
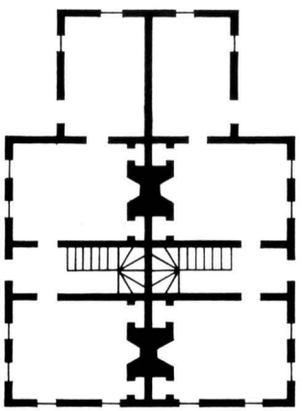
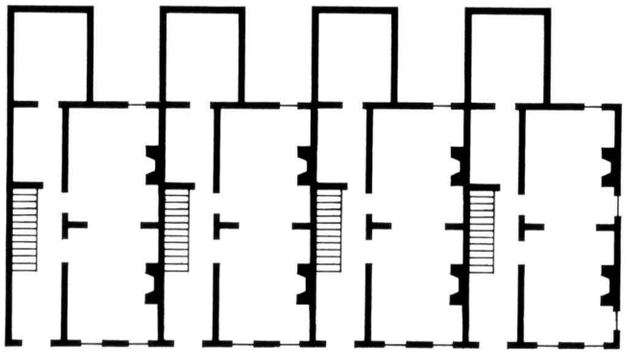
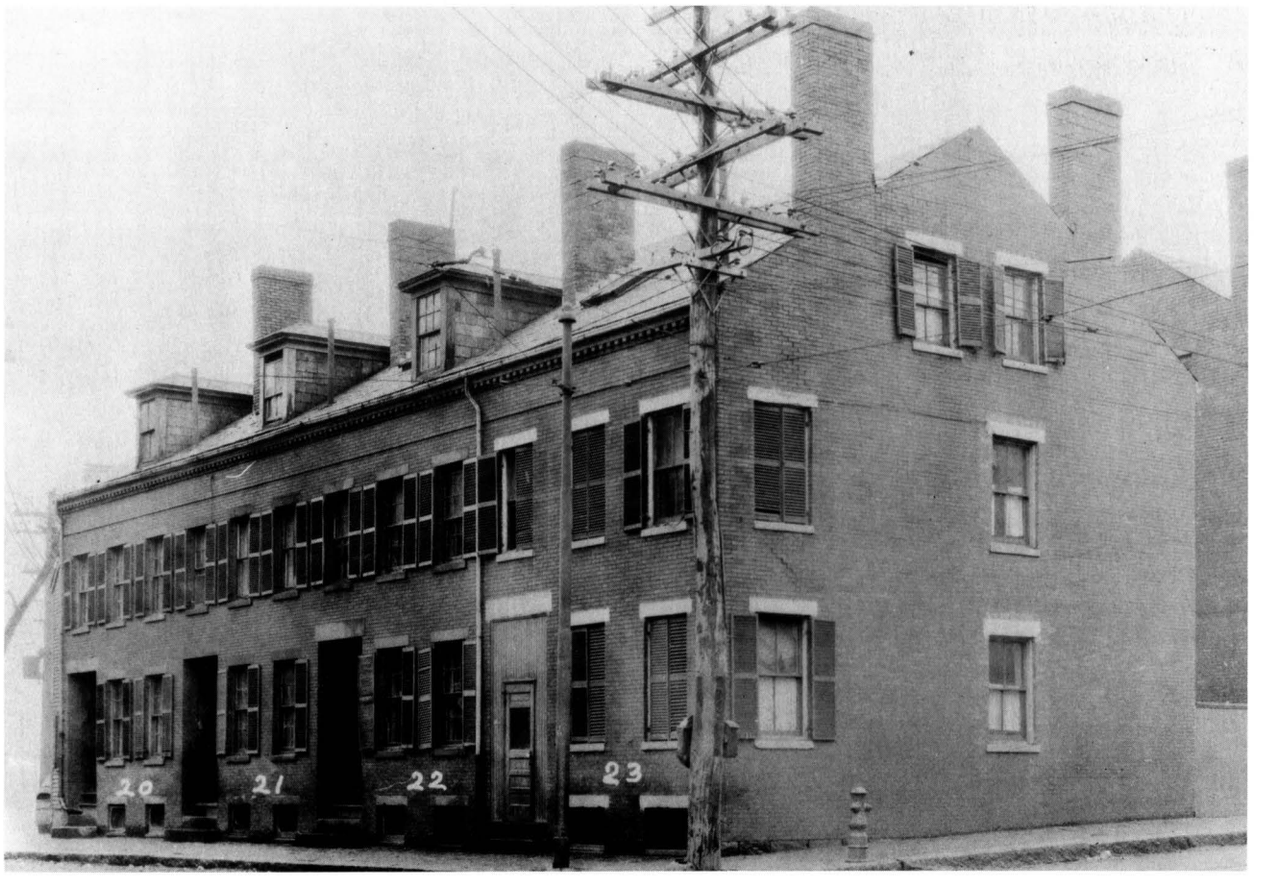




146. Type B double house, 98–100 Spring Street, 1840. Photograph 1964





147. Type C row houses, 208–224 Bridge Street, c. 1830. Photograph 1925

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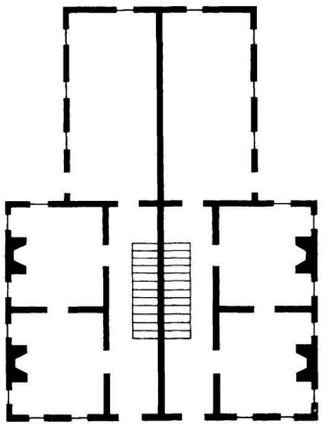
148. Type C double house, 73–75 Otis Street, c. 1830. Photograph 1964



Type B adapted itself particularly well to a double house (Fig. 146). The two halves were placed back to back, with entrances on the long, side facades and with party-wall chimneys rising up in the center; the roof was nearly always a gable, with its end facing the street. The type was not suited for row houses, except at the ends of rows, where the entrance could be around the corner (see Fig. 160).

Type C, the side-hall house, was the most prevalent type in East Cambridge, as well as the most interesting and varied. It was built freestanding, doubled, and in rows, nearly always two and a half stories high. In the 1820s this type had a gable roof, with its eave line to the street and with a single dormer in the center. In the Greek Revival period, the roof was turned so that the gable end faced the street; the single dormer became a single window in the pediment. The earlier three-opening facade survived, but as the century progressed a bay window was frequently substituted for the two first-story windows. The bracketed cornice became prevalent, and later the mansard roof appeared. Despite these stylistic modifications, the type itself hardly changed. The scale increased, and occasionally a single large parlor was substituted for the traditional two square rooms; otherwise, the general use and arrangement remained the same.

Near the beginning of the 19th century, in line with its 18th-century (and earlier) urban origins, Type C was most frequently used as a row house (Fig. 147). Later in the century there was a tendency toward the greater isolation of individual units; thus the double house and especially the detached house with its gable end to the street became more prevalent. Detached side-hall houses in the Late Georgian style, with their gable flank to the street and their square, boxy effect, looked like row houses cut off from their neighbors; when the Greek Revival brought about a reorientation of the roof profile so that the gable end faced the street, the type fared much better in its detached form.

Type C double houses nearly always had their doorways together in the center, their chimneys on the side walls, and the flank of the gable roof toward the street (Fig. 148). This configuration was followed for both practical reasons (it was hard to subsume two houses under a single gable-end-to-street roof) and aesthetic reasons (two small side-hall houses, so grouped, looked like the large, symmetrical center-hall type). Occasionally two side-hall houses were given a gable-end-to-street roof, but the resulting pediment was generally so high that it appeared awkward and ungainly.

When used as a row house, the side-hall plan of necessity had its gable flank toward the street, so that the roofs of the adjoining houses would line up. Dormers (generally one per house) and chimneys (generally shared by adjacent houses) punctuated the roof line at regular intervals. Adjoining houses were either paired (with shared doorways, chimneys, and rear ells) or simply lined up next to each other with the same relative position of doors, windows, and other features.

The most common East Cambridge houses, therefore, were Type C, the side-hall plan (used singly, doubly, or in rows), and Type B, the two-room center-hall plan (used singly, doubly, and occasionally at the ends of rows). Stylistic changes had little effect on the use and arrangement of these plans. They arose from 18th-century prototypes and were predicated on the ideal of every man in his own house (even if it was attached to its neighbors). The first really important housing change in East Cambridge came with the development of the flat, when living units began to be divided horizontally rather than vertically. Gradual rather than sudden, this changeover was more or less completed by the late 1870s, and by the late 1880s whole blocks of flats had been built, particularly on the western edge of the neighborhood, along Seventh and Ninth streets. Few single-family houses, large or small, were built in East Cambridge after 1880.

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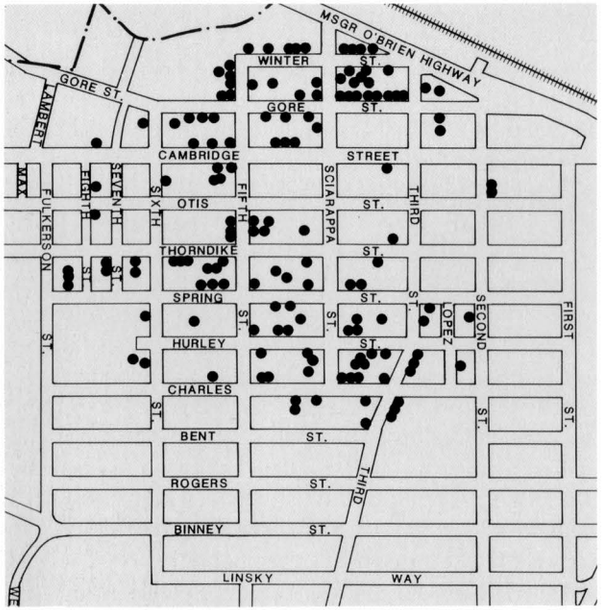

149. Late Georgian/Federal houses in East Cambridge

150. 198 Bridge Street, c. 1825, just prior to demolition in 1925

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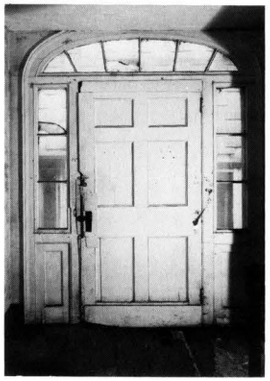
19th-Century Residential Styles

Late Georgian/Federal, 1820–50

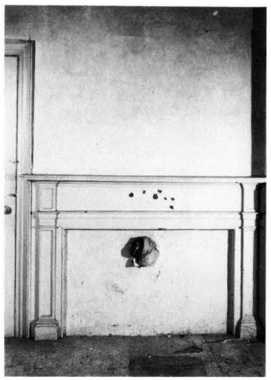
East Cambridge has a number of Late Georgian houses (Figs. 149–150). Some date from the 1820s, but quite a few were constructed after 1830. Most are relatively modest in scale and, when they are compared with Bulfinch's work on Beacon Hill between 1796 and 1806, it is clear that the houses in East Cambridge constitute a rear guard of the Federal movement.

Four-room central-hall houses (Type A) were unusual in this district of modest living accommodations. One example remains at 467 Cambridge Street, but the windows and doors have been removed, and it is hidden behind a later commercial block (see Fig. 143). Built in 1824–25, the main entrance of this once imposing house had sidelights and a customary if somewhat clumsy elliptical fan (Fig. 151). There were also good but simple Federal fireplaces in both the first- and second-floor rooms (Fig. 152).

The area's most striking surviving Late Georgian buildings are brick. Most are Type C (side-hall plan): a substantial town house at 59 Thorndike Street (1827) (see Fig. 155), a six-house row at 204–214 Third Street (1826–27) (see Fig. 163), and a simple dwelling with brick ends but wooden flanks at 96 Thorndike Street (1826–27) (Fig. 153); a few such as 200 Bridge Street (1825) follow Type B (see Fig. 158). In these examples, the familiar sheer plane of the facade controls the design, and the attenuation and refinement characteristic of the Federal style are evident. The main cornice is created by the slight projection of a few



151. Entrance, 467 Cambridge Street, 1824–25. Photograph 1964



152. First floor mantel, 467 Cambridge Street. Photograph 1964

153. 96 Thorndike Street, 1826–27. Photograph c. 1968

154. 26 Second Street, 1826–27. Demolished c. 1966. Photograph 1964

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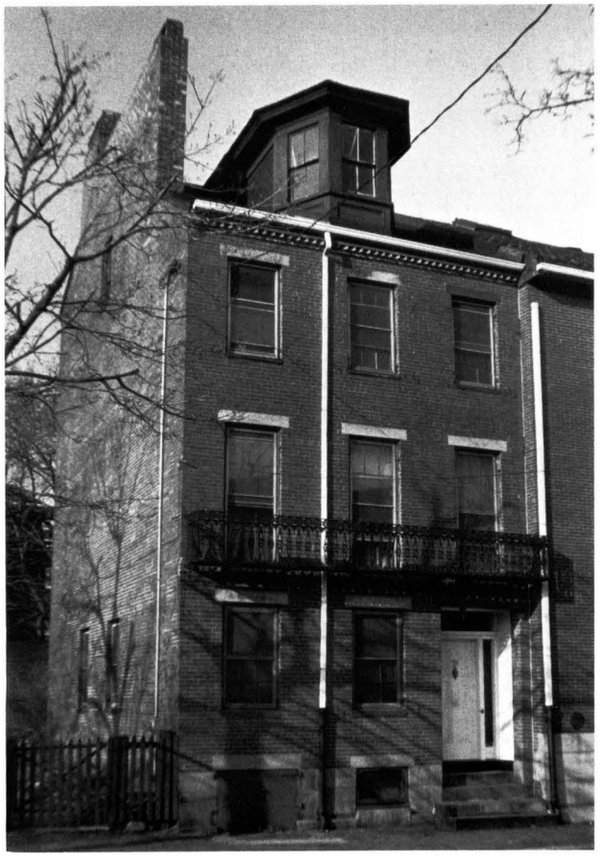

155. 59 Thorndike Street, 1827–28

156. Cast-iron balcony, 59 Thorndike Street

157. Etched sidelight, 59 Thorndike Street

rows of brick, one course of which is set at an angle or indented in a manner that recalls a dentil course. The foundations are made of granite blocks, but most of the flush lintels are brownstone. The brick used for the facing has a somewhat coarser texture and a more red-brown color than the smooth, salmon-colored pressed brick used in the fifties, and it is slightly larger in dimension (7⅜ by 3½ by 2⅛ inches) than the common brick used elsewhere in the house. (Modern bricks are even larger: 8 by 3¾ by 2¼ inches.) The face brick is laid with regular stretchers and alarmingly few headers to tie to the common brick core. The mortar joints for both the face and common brick masonry are fairly thin (3/16 inch), but the joints are not as thin nor are the bricks laid quite as regularly as in the 1850s and 1860s.

The simple, flat, rectangular quality of the facade is sometimes relieved by an elliptical brick arch that opens into a recessed entrance porch, such as 96 Thorndike Street, 26 Second Street (demolished) (Fig. 154), and 262–266 Cambridge Street (demolished) (see Figs. 164–165). Other Late Georgian examples have simple square entrances such as 202–214 Third Street and 204–210 Cambridge Street (demolished) (see Fig. 162). In both cases, the main door is flanked by sidelights and capped by a rectangular top light as wide as the door and sidelights together. The interior trim of brick houses does not differ from that of wooden buildings of the same time.

One of the best examples of a Late Georgian brick house that survives in East Cambridge is 59 Thorndike Street (1827–28); it was built by Atherton Stevens, a prominent Cambridge merchant and a descendant of the 17th-century settler Atherton Haugh (Fig. 155). In 1827, when the Third Congregational Society of Cambridge purchased a lot for a church at the corner of Thorndike and Third streets, it sold the west part of the lot to Stevens to help cover the cost of construction. Stevens occupied 59 Thorndike Street for six years and then sold the property to W. S. Rodgers, who, in 1843, sold it to John L. Sherriff; his brush factory was one of East Cambridge's most prominent early industries.

Following the pattern established by the church, 59 Thorndike Street is built close to the sidewalk, thus reserving open space at the rear of the lot; its generous side yard provides rare open space in the densely built neighborhood. The narrow brick town house, with its low pitched roof and double end chimneys, is a striking example of the Late Georgian in East Cambridge. The sheer plane of the facade controls the design, and the attenuation and refinement characteristic of the style are evident. A wooden octagonal dormer on a paneled base projects from the center of the front slope of the roof above a handsome sawtooth brick cornice. The windows on the first and third floors contain standard six-over-six sash; the second-floor windows extend to the floor, indicating the main living floor of the house. An elaborate cast-iron balcony extends across the second floor, further emphasizing the major rooms at this level (Fig. 156). The recessed entrance has a six-panel door with etched sidelights and a rectangular top light, characteristic of the style (Fig. 157). The window sills are wood but the lintels are granite; they were originally painted to simulate brownstone. The foundation also is granite.

The interior detailing reflects the elegance of the facade while showing the influence of the bolder proportions of the Greek Revival style, which was gaining popularity in the late 1820s. The main parlor is placed longitudinally across the front of the second floor, tak-

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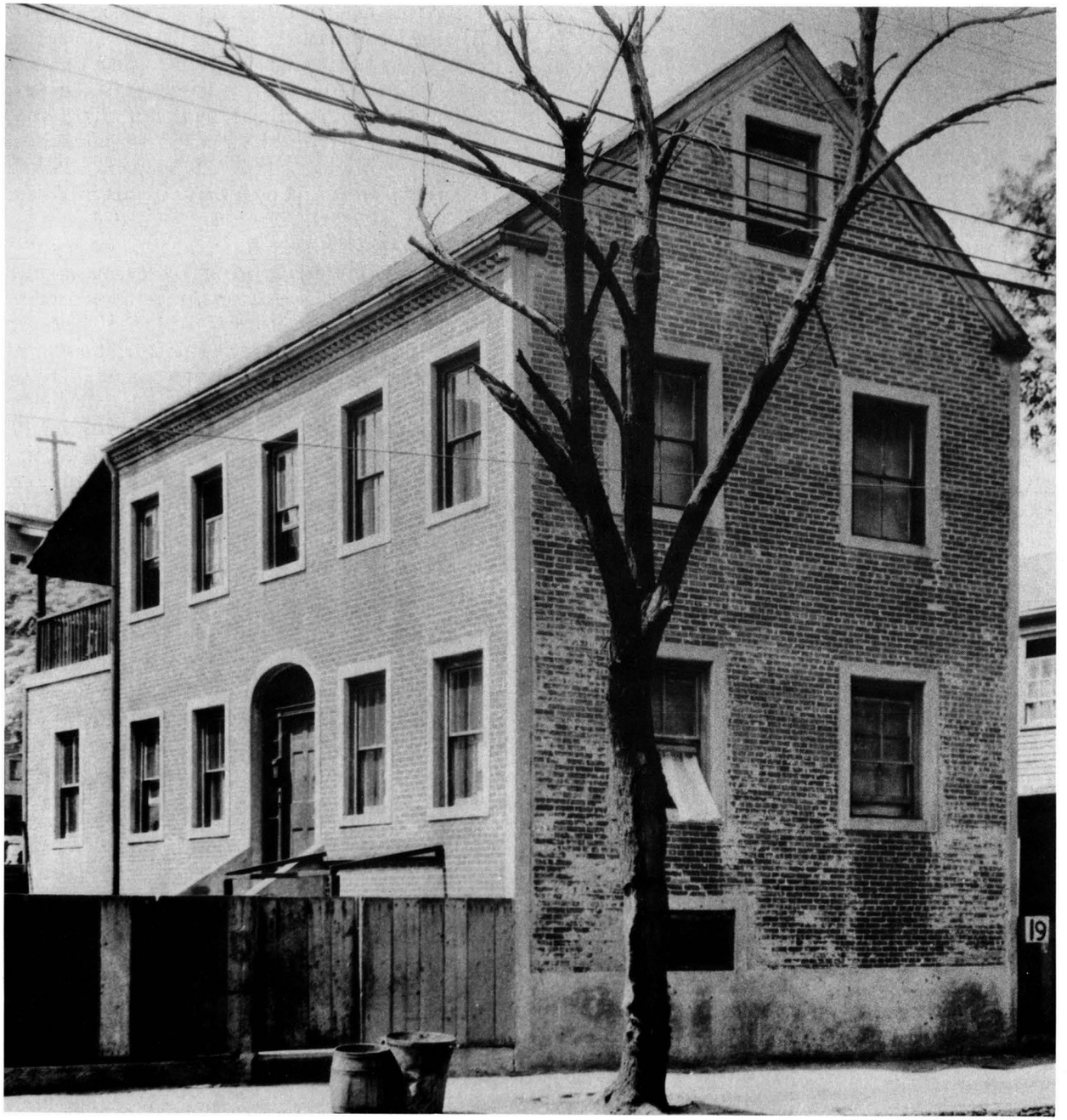

158. James B. Barnes House, 200 Bridge Street, 1825. Moved to 109 Hampshire Street in 1984. Photograph 1925

159. Parlor fireplace, 200 Bridge Street

ing advantage of the 18-foot width of the house. The window and door frames have pediments and battered stiles, suggesting an Egyptian Revival influence, and a delicate waterleaf moulding echoed in the plaster ceiling.

Equally impressive is the earliest surviving free-standing brick house built in East Cambridge (Fig. 158). This house originally stood at 200 Bridge Street, where it was built for James B. Barnes in 1825. Barnes was a glassmaker from Dorsetshire who immigrated to the United States in 1817, at the age of 28. He rose to prominence in the New England Glass Company and was known primarily for designing the company's red lead furnace in 1819. In its original location, the gable end of the Barnes House was angled to follow the line of Bridge Street. The formal five-bay center-entrance facade faced the side yard and was thus protected from the traffic along this main thoroughfare. The outside trim includes a sawtooth brick cornice and recessed arched doorway similar to those of other Federal brick houses in the area (i.e., 262–266 Cambridge Street; 1829), but the flat trim around the windows and doors is unusual — a lime and sand parging material tinted light tan to resemble stone. Inside, elegant Federal fireplaces highlight the rooms on the main floor (Fig.

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160. 45–51 Gore Street, before 1821

159), and a tight central stairway with a slender, turned Federal newel post leads to the plainer rooms on the second floor. In the 1920s, the house was moved back on its lot and turned 90 degrees to accommodate the widening of Bridge Street; in its new location it has been reoriented to its original position, with the angled gable end facing the street.

The most substantial brick houses of the 1820s were erected by the Lechmere Point Corporation in an attempt to set a high architectural standard for its newly developing area. Unfortunately, only one group of corporation houses has survived. The Federal block at 45–51 Gore Street and 25 Third Street is the oldest known structure in East Cambridge and the only one built by the Lechmere Point Corporation (Fig. 160). Although its exact date is unknown, it had to be before 1821, when the corporation sold the block to Governor Christopher Gore, a stockholder who speculated widely in East Cambridge real estate on his own account.

The two-story brick block contains four houses under what was originally a single gable roof running parallel to Gore Street. The houses at each end of the row are entered through doorways placed in the center of each facade; the two houses in the middle of the row are entered from Gore Street and appear to have typical side-hall plans. Only the building facing Third Street remains substantially unchanged. The pedimented gable now has asphalt siding, but it originally probably had flush boarding; on the brick wall below, only the deeply recessed center entrance relieves the undetailed facade. The first floor of 47 Gore Street has been simplified and the windows changed. The unit at 49 Gore Street has been remodeled with arched windows and an additional story, and a mansard roof has been added to number 51.

Even more ambitious were the elegant three-story brick rows that the corporation put up in the early 1820s on the west side of Second Street between Otis and Cambridge streets (Fig. 161). These rows are known only through photographs, for they were demolished in 1896 to make room for the Registry of Deeds; there were no doubt other, similar corporation rows, particularly near the courthouse, but no visual records remain. Domestic building on the scale of the Second Street row was not attained in East Cambridge again until the 1850s, with the building of 55–61 Otis Street (see Fig. 209).

The Lechmere Point Corporation encouraged its proprietors and other individuals to follow its example in building substantial brick row houses. Thus it sold property on Second Street in 1822 with the restriction that any buildings "be built of brick conformable to the other four houses on the Square" (see Fig. 161). Typical private developments in the 1820s were the three-story row at 204–210 Cambridge Street, built by 1825 on the site of the present Registry of Deeds (Fig. 162); single houses such as 26 Second Street (1826–27), which followed the row house form (see Fig. 154); and the two blocks discussed below. The early brick rows seemed to set a trend, and row houses became more common in East Cambridge in the early- and mid-19th century than in other parts of the city.

A six-house brick row from 1826 still stands at 204–214 Third Street (Fig. 163). The owners, Edmund Munroe, a former proprietor of the Lechmere Point Corporation, and Deming Jarves were both principals in the New England Glass Company. Located along the lower part of what was then known as Court Street, which provided the only access from Cambridgeport and the West Boston Bridge to the courthouse, this row was fairly isolated from the settled part of East Cambridge. It was conveniently close, however, to the New England Glass Bottle Company, which Munroe and Jarves established in 1826 just southeast of the houses, and the row became known as the Bottle House Block (see p. 187). It is not known whether this

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161. 27–31 and 33–39 Second Street, early 1820s. Demolished 1896

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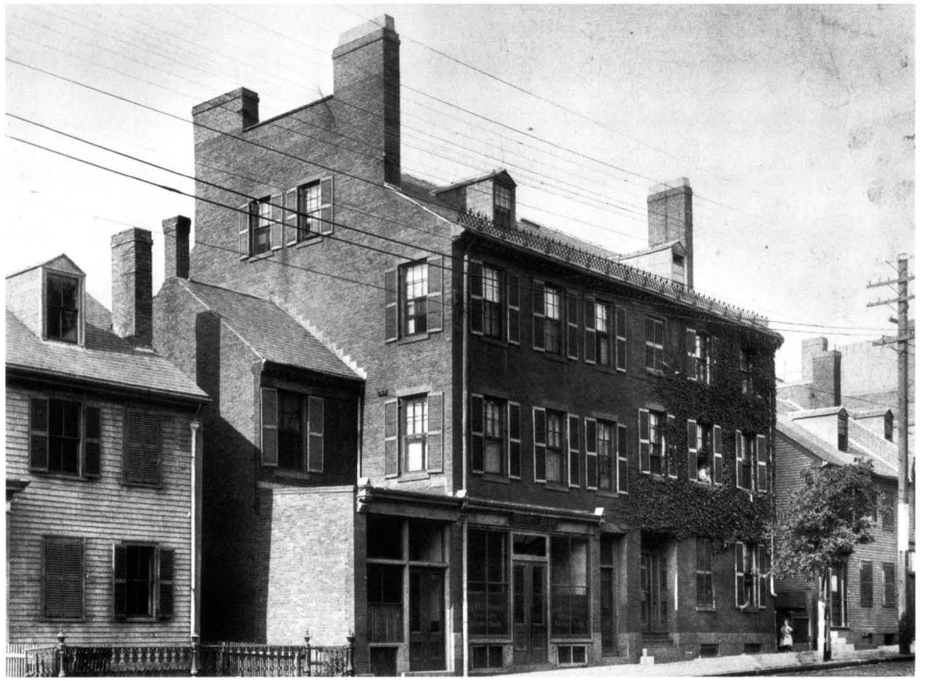
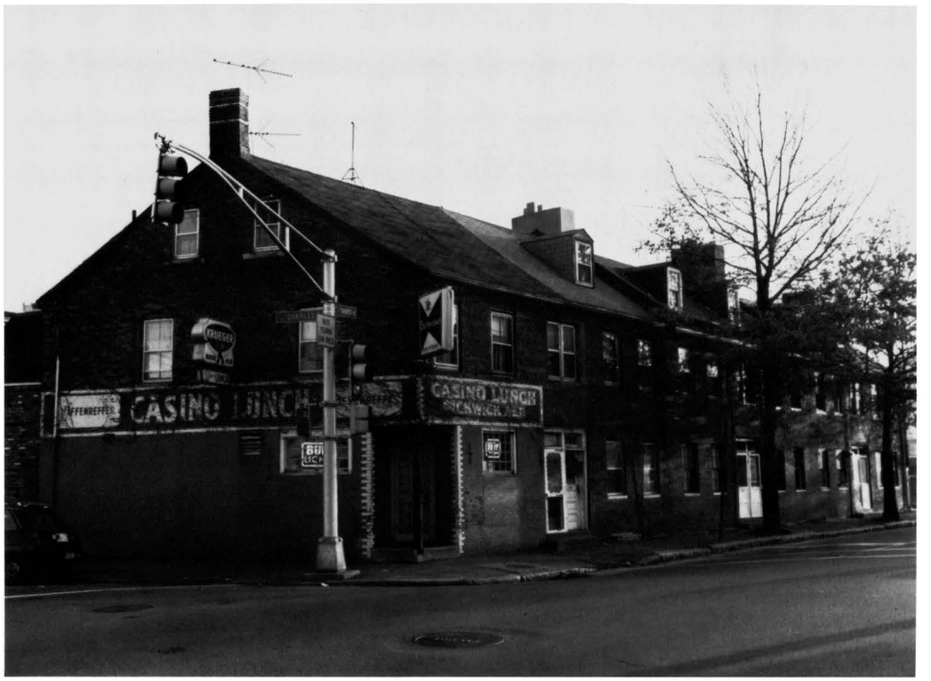


162. 204–210 Cambridge Street. Demolished 1896



163. 204–214 Third Street, 1826

row was originally built to house glassworkers; the company closed in 1845, and the corner house of the row became a tavern, as it remains today. To date, three of the units have been restored.

No longer surviving is the well-documented block of two Federal brick houses at 262–266 Cambridge Street (Fig. 164). Amos Binney, a merchant and Agent of the Charlestown Navy Yard who was the second largest shareholder in the Lechmere Point Corporation, built these attached houses in 1829. After the corporation was dissolved in 1822, Binney continued to deal extensively in real estate and by 1830 owned forty-one houses in East Cambridge. Like most of his holdings, the two houses on Cambridge Street were built as rental or speculative property; they remained in his family's possession until 1866.

The generous setback of these houses is unusual in East Cambridge, but they were originally part of a larger architectural unit with the Methodist church and parsonage (1823–26), now demolished (see Fig. 290). The church faced Third Street while the parsonage, built at its rear wall, faced Cambridge Street. Binney had been a member of the church building committee, and his two houses continued the Cambridge Street facade of the parsonage and the church.

Set on a high, dressed stone basement with passageways through to the back yards, the facade of Binney's block showed the severe geometrical lines characteristic of late Georgian and Federal urban architecture, relieved only by elliptical arches framing the recessed doorways and the brick dentil cornice at the roof line (Fig. 165). The form of the roof represented an ingenious solution to gaining interior space when the cornice of the houses needed to match that of the church: the third floor was expressed on the front only as dormers in the roof, but at the back it was a full upright story, making that elevation three full stories plus basement. A similar arrangement occurs at 59 Thorndike Street, where the lines of the house were determined by an existing church building. The demolition of these two houses was a great loss to the neighborhood, as they were among the last to show the fine residential qualities that the Lechmere Point Corporation and its proprietors had envisioned for East Cambridge.

The latest attached brick houses of this style still standing in East Cambridge are 30–32 and 34 Second Street (Fig. 166). Built only three to six years before the Greek Revival row directly to the south at 36–46 Second Street (1842), they show how little the row house form and plan changed during this period. Only the exterior ornamentation indicates the transition from one style to the other.

More Late Georgian houses in East Cambridge were built of wood than brick; they were generally similar in form but more modest than the brick examples described above. These wooden houses have a similar

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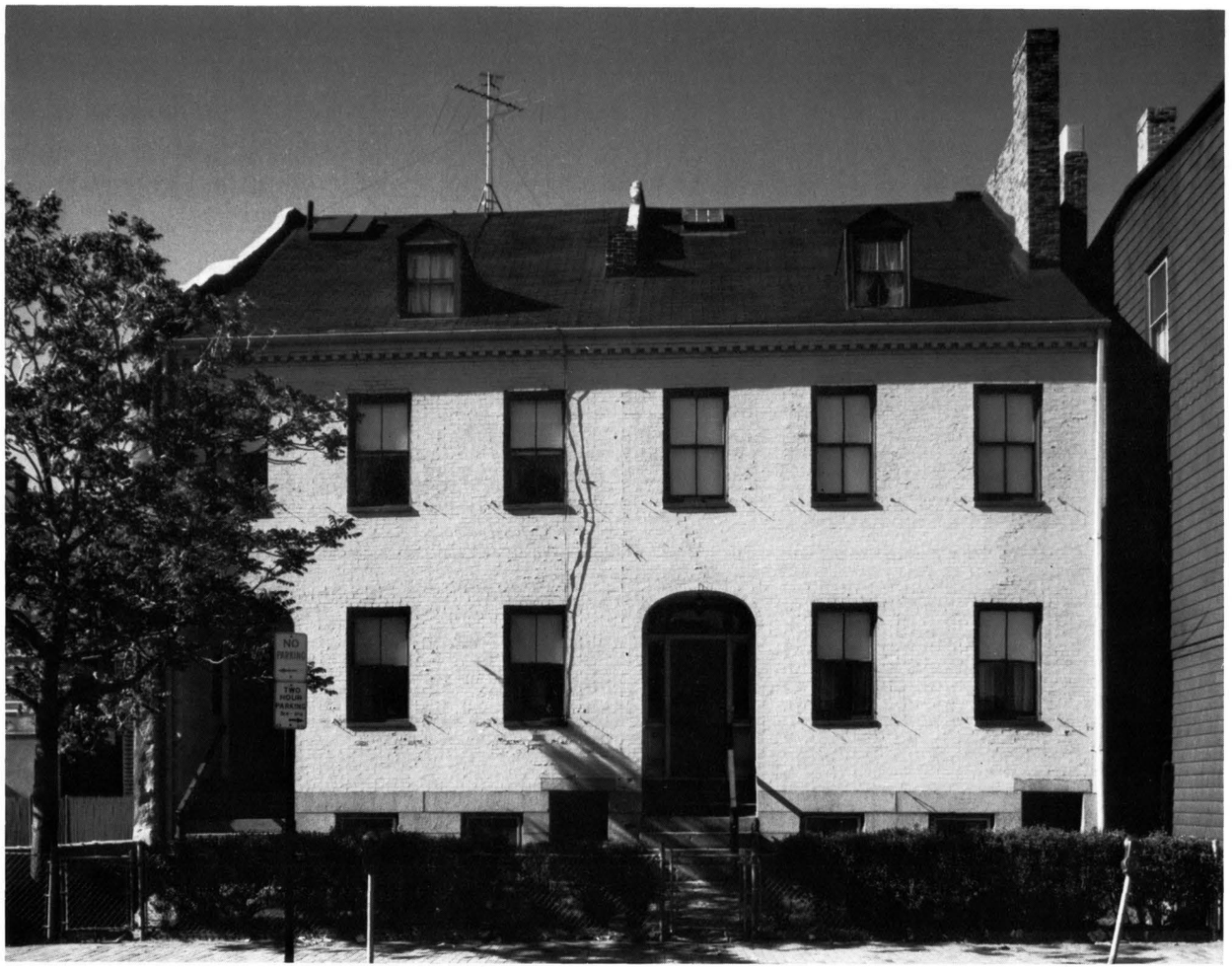
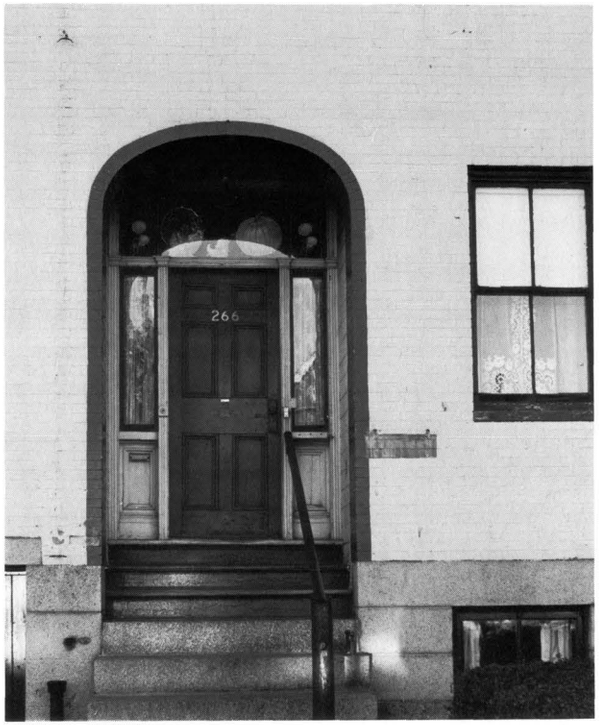
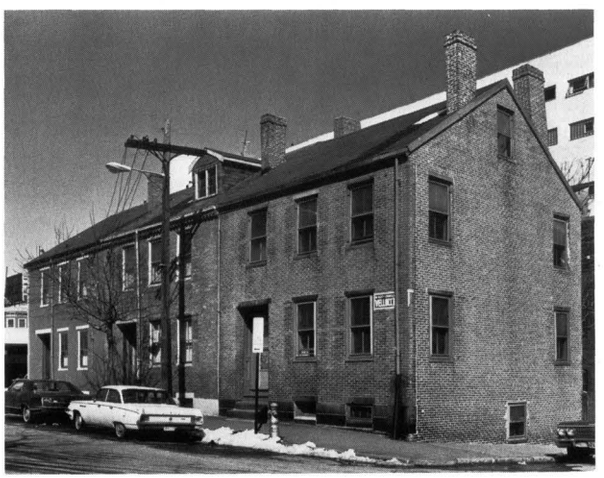


164. 262–266 Cambridge Street, 1829. Photograph 1969



165. Entrance, 262–266 Cambridge Street. Photograph 1964



166. 30–32 Second Street (1839) and 34 Second Street (1836). Photograph 1970

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167. Winter Street worker's cottages, c. 1940

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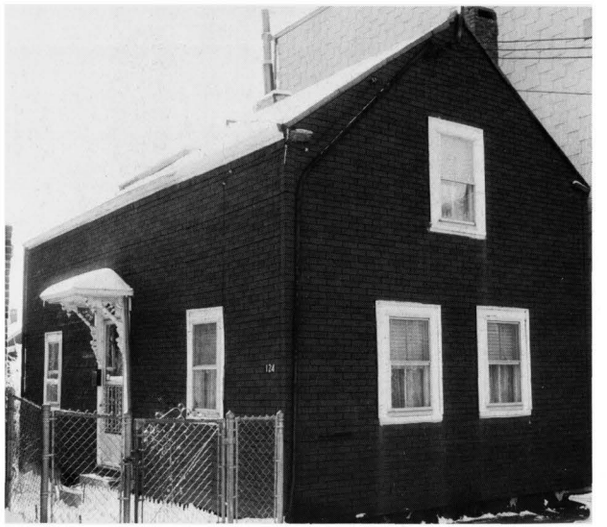
168. 86 Gore Street, 1821



169. 124 Thorndike Street, 1841. Photograph 1964

170. 11 Eighth Street, 1870. Photograph 1964

light cornice marking the intersection of the facade and sloping roof (Fig. 167). The cornice generally projects a bare 4 inches, but it is augmented by a wooden rain trough that returns at the end of the facade. The upper-story window caps fit tightly against the eaves, a holdover from the 18th century (see Fig. 150). Sometimes the wooden mouldings that support the cornice are interrupted by the window opening; in other instances, the moulding breaks forward over the window frame. The gable ends are finished with a crown moulding on the raking cornice that projects about 3 inches from the wall. These light but nicely scaled cornices emphasize the geometric content of the building mass.

Structurally, some of these wooden Late Georgian houses employ a heavy framework of vertical posts and horizontal plates, girts, and sills that goes back to the 17th century. By the 1820s, framing members were generally smaller and framing methods simpler, but traces of the old system can still be seen in the corner posts in most early wooden houses in East Cambridge. By this time, however, some of the plates and girts were concealed by dropped plaster ceilings, as in the first floor of 467 Cambridge Street (1824).

Wall surfaces between the large framing timbers were traditionally constructed in one of two ways. One system used studs of varying sizes (but heavier than today's nominal 2 by 4s). A nonstructural insulating material sometimes filled the space between the studs, and split lathing nailed to the studs supported the interior plaster. Stud construction combined with a braced frame was the most common structural system in East Cambridge, and after 1840 it became general until the introduction of the Western or platform frame in the 1890s. The balloon frame, which was introduced in Chicago in the 1840s, was never popular here.

A second, more unusual system used 1- to 1½-inch-thick boards placed vertically between the large horizontal girts and sills. Exterior siding and interior lath were nailed directly to these vertical boards. The walls in this system were thin (3¼ to 3½ inches), which caused the window frames to project as much as 1¾ inches beyond the outside face of the wall. A few houses, such as 467 Cambridge Street, used studs for exterior walls and vertical boards for interior partitions.

The most common form of Late Georgian wooden construction in East Cambridge is the worker's cottage, a long, narrow (12 to 16 feet wide) dwelling generally set with the narrow end to the street and the center entrance facing a side yard. Built throughout the area between 1820 and 1870 and set close together with no setback, these cottages created a feeling of urban density, yet retained a private entrance and open area in the side yards. When placed at the rear of a lot, they were sometimes set with the long side toward the street so that they resembled larger, four-room center-hall houses. Their basic form is a holdover from the 18th century, and the only exterior trim is usually a simple cornice derived from the same period. Roofs are either hipped, which seems to be the earliest form (86 Gore Street, 1821), gabled (124 Thorndike Street, 1841), or flat (11 Eighth Street, 1870), although some flat roofs may stem from later alterations (Figs. 168–170).

The gabled worker's cottage is probably the most prevalent wooden house type in East Cambridge (Fig. 171). Built as single or double houses, these cottages range from one to two and a half stories. All, however, share a standard two-room center hall plan and a uniform three-run stair, which could be squeezed into a

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171. 146 Thorndike Street, 1829–30. Photograph 1964

172. Rear facade, 146 Thorndike Street. Photograph 1985

173. Front entrance, 98 Spring Street, 1840. Photograph 1964

174. Bedroom mantel, 467 Cambridge Street, 1824. Photograph 1964

175. Stairs, 75 Winter Street, 1838. Photograph 1964

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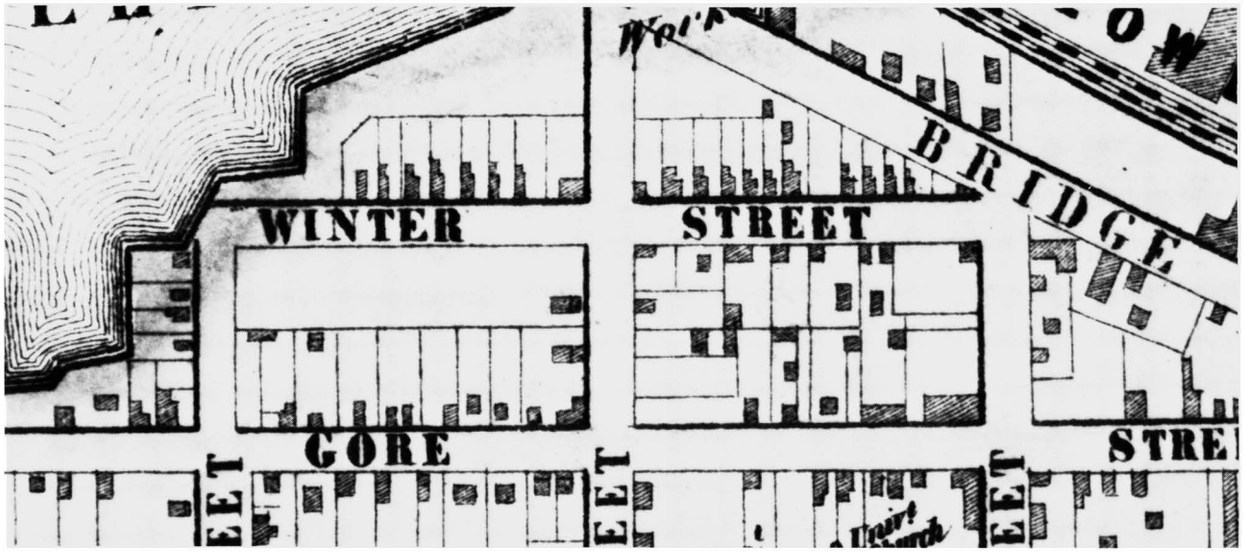
confined space and still permit a tiny room behind the stairs.

Distinctive exterior features include the entrance, the windows, and the placement of chimneys. The cottages generally had two separate fireplaces, and the tall, thin chimneys rising near the eave line on the rear wall formed an unusual profile on that facade. The houses at 146 and 146½ Thorndike Street (1829–30) provided an excellent example of this characteristic feature until a 1987 rehabilitation, and were important survivors of this type (Fig. 172). The tiny cottage at 146 retains a few of its original clapboards and some of the original entrance treatment, but all of the windows were replaced during the process of rehabilitation, the chimneys were removed, and skylights and a long blank dormer now dominate the roof line. At the same time, the adjoining cottage at 146½ was taken down to its frame, but it still retains one Federal wooden mantel and the characteristic central stairway. The two cottages were originally separate, but the ells (which were demolished and rebuilt in 1987) were joined after 1934, when plumbing was added between the two houses, creating the continuous rear facade.

The original entrance treatment of the cottages always comprised sidelights and a simple cornice (Fig. 173). The door jambs were usually left plain but occasionally had thin pilasters. This basic composition continued through the Greek Revival period, although carpenters then used much heavier trim and broader mouldings.

Worker's cottages had simple double-hung windows with six-over-six sash and exterior shutters. Lights were approximately 9 by 12 inches, about as large as it was then convenient to make sheets of glass. This size continued until the early 1850s, when it became possible to manufacture 15-inch-wide sheets and two-over-two sash became common.

Inside, architectural attention centers on the stairs and fireplace surrounds. A number of cottages built after 1830 have handsome black marble mantelpieces that follow a fairly standard design based on a simple panel and lintel scheme. Wooden mantels show more variation; they were made in the same way as those in more expensive dwellings by combining different



176. Winter Street in 1854

mouldings then in common use. Thus, the parlor and dining room mantels at 86 Gore Street (1821) resemble those in the bedrooms of the more elaborate house at 467 Cambridge Street (1824) (Fig. 174).

Similarly, the details of a cottage stair at 75 Winter Street (Fig. 175) are virtually identical to the back stairs of the large row house at 46 Second Street (1842) (see Fig. 216). Both have plain, 1-inch-round balusters and a turned 3-inch newel post of elegant simplicity. The plan of the cottage stair, however, is distinct. Cramped into the 8- or 9-foot width of the front hall, the stairs double back to form a U-shape very much like the chimney stairs in 17th-century New England houses. In a few later examples, the whole center of the cottage is given over to a stair hall and a straight flight of stairs, but this plan eliminates the auxiliary room behind.

The only interior wall decoration is the chair rail, which follows the height and profile of the window sills. Instead of paneling on the fireplace wall, there were generally two shallow but projecting closets on either side of the chimney breast. The interior door and window trim derive a lightness and elegance from the common mouldings then in use. Interior doors are usually fairly thin, only 1⅛ inches thick. Important doors are divided into six countersunk panels; less important doors have just four panels and on one side the panels are not recessed.

Many of the worker's cottages in East Cambridge have been torn down or altered. Winter Street between Cambridge and Bridge streets now contains the largest surviving group, built mostly between 1833 and 1854 (see Fig. 167). The first documented house was built on Winter Street in 1833; thereafter, the street developed relatively quickly and with surprising uniformity. By 1854 there were twenty-six houses, most of them Late Georgian wooden worker's cottages (Fig. 176). All of these houses were built privately, some by individuals for their own use and some by large landholders who rented and later sold them, in direct response to the growth of the glass industry. In 1849, the Cambridge directory listed forty-one households on Winter Street, more than a third of them connected with the glass industry, and by 1857, glassworkers' families filled most of the cottages on the north side of the street. While none of these houses is unusual in itself,

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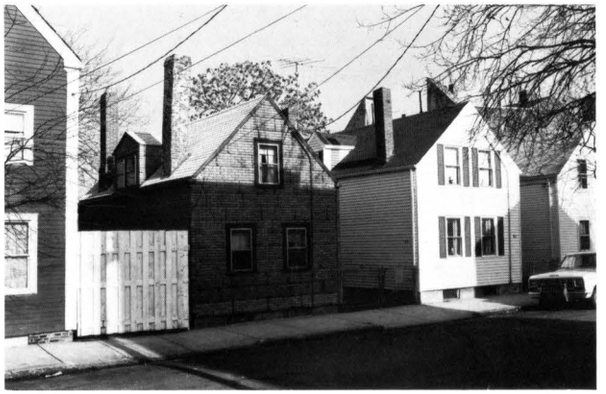
Winter Street as a whole is unique because so many cottages were built together and have survived.

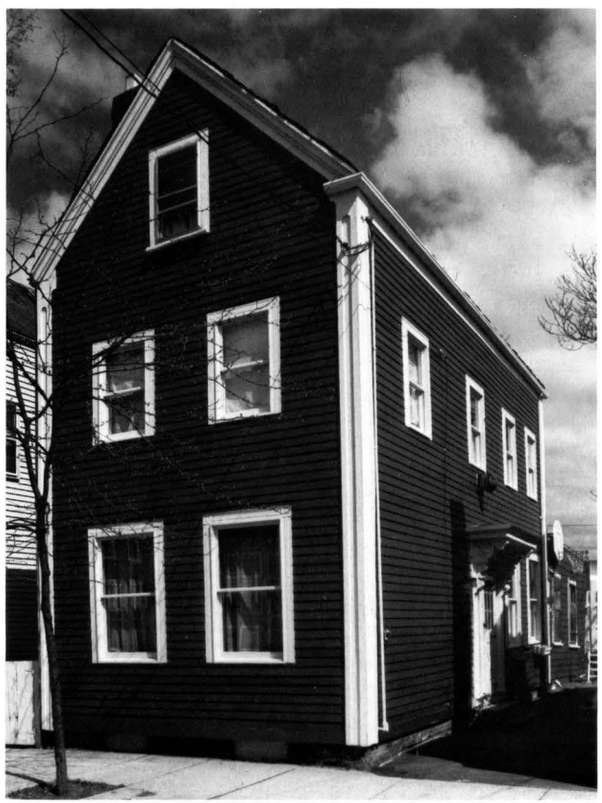
One of the best preserved examples is the two-and-a-half-story cottage at 75 Winter Street, constructed in 1838 and recently restored (Figs. 177–178). The characteristic Late Georgian eaves and cornice contrast with the bracketed entrance hood added in the 1870s — a common 19th-century embellishment to these otherwise plain dwellings (Fig. 179). The interior follows the standard plan, with a steep three-run stair (see Fig. 175); the fireplace shows the elaboration that these houses sometimes achieved (Fig. 180).

The smallest worker's cottages on Winter Street were numbers 67–71, constructed in 1843–44 by Atherton Stevens, an East Cambridge grocer who first rented and then sold the cottages to artisans (Fig. 181). A comparison with 146 Thorndike Street, built fourteen to fifteen years earlier, shows how little this type changed over time.

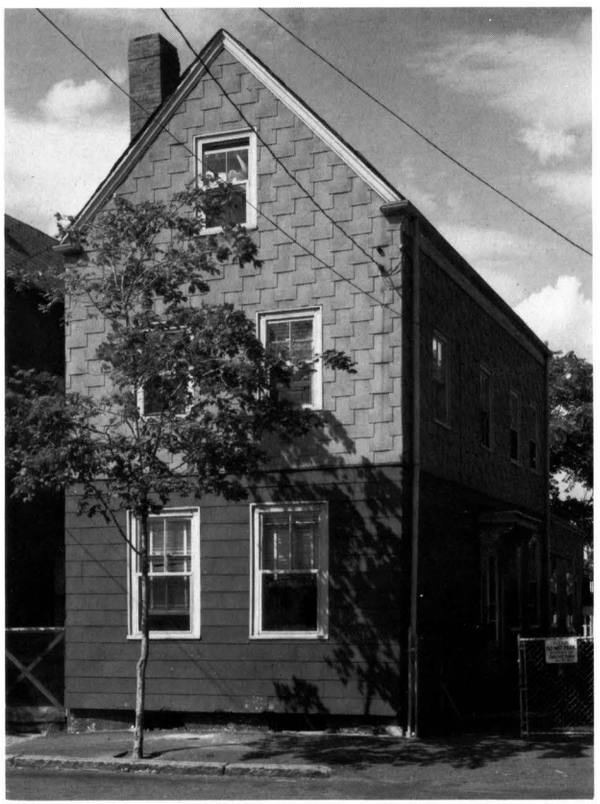
The majority of workers living in the Winter Street cottages at midcentury were skilled and semiskilled craftsmen and factory workers, but the glassworkers ranged from general laborer to superintendent. Thomas Leighton was a master glassmaker who had been brought to East Cambridge from England in 1826 to become superintendent of the New England Glass Company. When he decided to build a house, he chose Winter Street and put up a characteristic two-and-a-



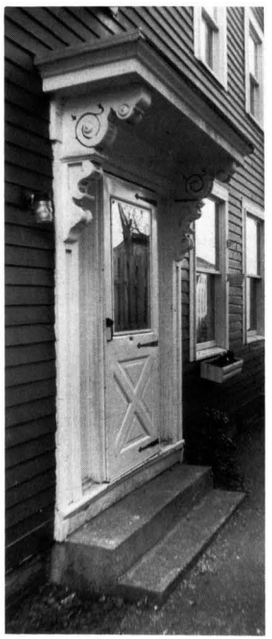
181. Worker's cottages, 67–71 Winter Street, 1843–44



177. 75 Winter Street, 1838, after restoration



178. 75 Winter Street in 1964



179. Entrance, 75 Winter Street

180. Fireplace. 75 Winter Street. Photograph 1964

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182. Thomas Leighton House, 22 Winter Street, 1833–34. Photograph c. 1860

183. Leighton family members in the parlor of 22 Winter Street. Photograph c. 1860

half-story worker's cottage (Fig. 182). Although it was somewhat larger than many on the street, it did not differ in any other way, showing that these houses, while perhaps modest and behind the times in architectural style, were a respectable choice for all classes of employees.

A rare 19th-century interior view of 22 Winter Street shows that the Leightons lived comfortably; the ruby glass newel post ornament, fashioned as a gift for Thomas Leighton, shows how even such modest houses were not without touches of elegance (Figs. 183–184). Leighton may have chosen the workers' neighborhood of Winter Street because of his background as a glassmaker rather than as a manager, but he was a capable superintendent and highly respected in the community. After he died, in 1849, his son became superintendent, and the house remained in the Leighton family until 1890.

Greek Revival, 1840–55

The Greek Revival style is what one remembers about East Cambridge (Figs. 185–186). The preferred style of builders when the district was in its heyday, the Greek Revival houses are notable for their variety and high quality as well as for their quantity. Streets such as Thorndike and Spring are essentially Greek Revival

184. Ruby glass newel post ornament, 22 Winter Street

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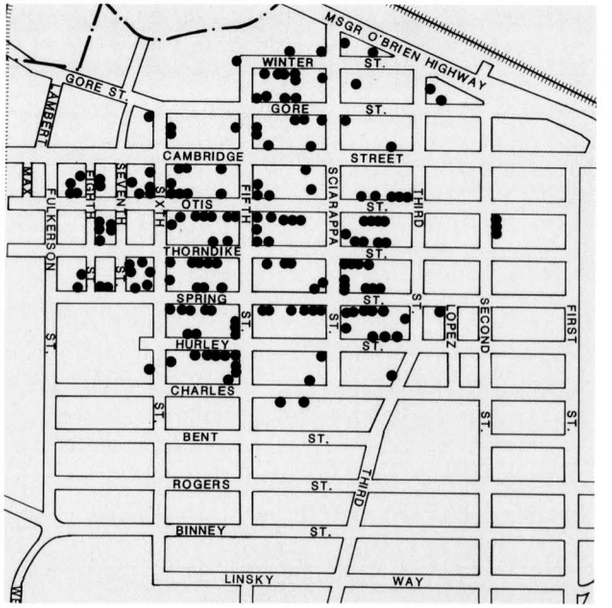
185. Greek Revival houses on Thorndike Street, between Third and Sciarappa. Photograph c. 1964



186. Greek Revival houses in East Cambridge

in character (although earlier and later styles are mixed in), and the houses that line them demonstrate the great versatility that exists within the style. Rows of town houses mingle with single houses, double houses, and simple cottages, brick with wood, expensive with modest; but each has an innate dignity that arouses admiration in the critic. These Greek Revival houses fall between 1840 and 1855, but leading Boston architects were using the style by 1820, so it is clear that the work in East Cambridge was not epochmaking. Carpenter-builders in this period worked by using architectural forms that had already entered the public domain of vernacular architecture — a process that is evident from the 18th century and that continues today. And, although there is evidence of great ingenuity in the way the various parts were put together, almost all of the wooden trim and decorative forms were standard and available commercially.

When compared to Late Georgian building, the Greek Revival in East Cambridge introduced little that was new in the way of planning or construction. The

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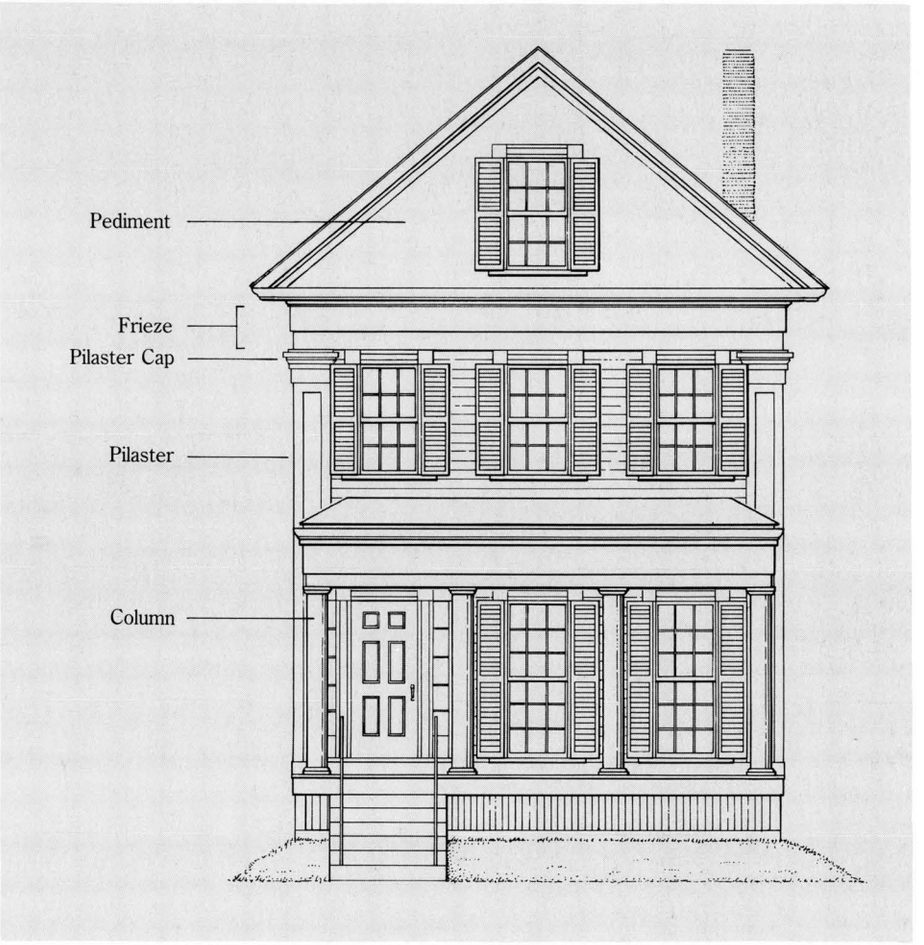
single side-hall plan so prevalent in these times did not vary essentially from the row house plan used in the earliest days of settlement. The Greek Revival houses, however, were usually more elaborate than the area's Late Georgian examples, for the district was more securely established in the 1840s than it had been in the 1820s, and owners felt safer about making larger investments in their buildings. The overall character of East Cambridge was also beginning to change at this time. While some Greek Revival houses, particularly double houses such as 67–69 Otis Street (1839) and 103–105 Otis Street (1843–44), were built with their long facades facing the street, most were set with their narrow gable ends facing the street. As the century progressed and more lots were filled with houses, the area increasingly assumed the feeling of a tightly built urban neighborhood, with houses set close together on narrow lots.

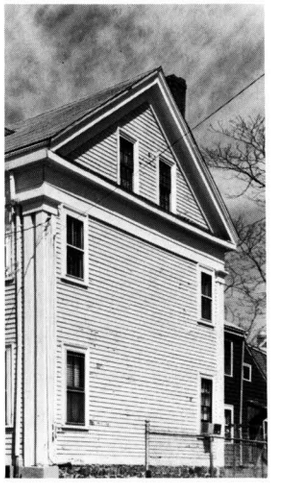
In outward appearance, East Cambridge's Greek Revival houses vary considerably from the Late Georgian (Fig. 187). Their ornamentation is more three-dimensional than before: the eaves and gable trim project farther in front of the walls; columned porches project from the front or side facades; and wall surfaces are animated with an overlay of decorative pilasters, entablatures, and door and window frames. While the proportions do not change noticeably from the neighborhood's Late Georgian buildings, the earlier hip roof yields to a standard gable roof.

The facade of a Greek Revival house is enlivened by a quantity of applied ornamentation derived from Greek architecture but entirely Yankee in materials and use. The most characteristic feature is the treatment of the gable end as a Classical pediment (Fig. 188). In addition, the eave line was generally treated as a complete Classical entablature. In frame houses, this means that projecting eaves are boxed in to form a cornice, and two wide horizontal boards below the cornice serve as the frieze and architrave. Never decorated, these boards are lapped or separated by a narrow moulding, and they usually project 1 or 2 inches in front of the siding.

No Greek Revival house in East Cambridge was ambitious enough to have a freestanding two-story portico, but that element is recalled by the treatment of the gable end of the house and the use of corner pilasters. Nothing betrays the naiveté of the Yankee designer more than his use of this feature. At times, he correctly used one pilaster for each bay of the composition, as at 93 Otis Street (see Fig. 199), but more often he reserved the feature for the corners of the facade, thus leaving the whole middle of his composition visually unsupported. Pilaster caps are built up of stock wooden mouldings. The pilasters themselves are never fluted like the columns, but are simply wide vertical boards that project slightly from the wall. Sometimes they are given a paneled effect by applying a 2- or 3-inch nailing strip along their edges (Fig. 189). When the house also contains a porch or elaborate entrance, there is often not enough wall surface to include all the features without crowding, and parts may be omitted. Notwithstanding such design difficulties, the pilaster imparts a certain scale and character to the composition, and nothing reduces one of these



187. Typical side-hall Greek Revival house


188. Pediment detail, 67–75 Spring Street, 1847

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189. Pilaster and entablature detail, 74 Thorndike Street, 1843–44

190. 80 Sciarappa Street, 1846–47. Photograph 1968

Greek Revival houses to anonymity more quickly than the removal of its pilasters and capitals in the process of siding and modernization.

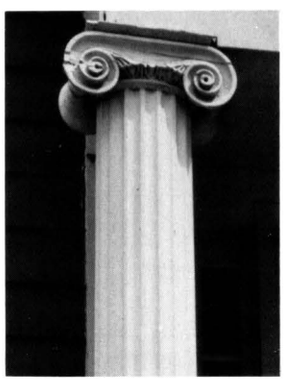
Greek Revival entrances employed the same rectangular front door compositions with side and top lights that were used in the neighborhood's Late Georgian houses. In masonry buildings, however, an ample brownstone lintel replaced the elliptical entrance arch of the earlier period. Compare 262–266 Cambridge Street (1829) (see Figs. 164–165) with 55–61 Otis Street (1851) (see Fig. 209). The windows continued to use 9-by-12-inch glass panes, but the exterior window frames of wooden houses were wider and often had corner projections, or crossettes. Exterior shutters continued in use. Most walls were clapboard, but flush siding was sometimes used for facades, particularly on pediments and under porches. Slate continued to be the principal roofing material, and foundations were granite slabs or the slatelike Somerville argillite known locally as ledgestone.

Despite its many similarities to the Late Georgian, the Greek Revival is evidence of the beginning of a new restless and assertive spirit in American architecture. Instead of being content to repeat standard Federal dwellings with their exquisite details, designers began to demand more conspicuous "show" and to search for variety. At the same time, however, they expressed themselves within a still limited range of familiar house plans and a restricted decorative vocabulary. The Greek Revival period, therefore, is pivotal and transitional, and the buildings exhibit an intriguing interplay of a fixed repertoire of forms and correct Classical detailing on the one hand and the new spirit of experiment and expressiveness on the other.

One help in attaining this new expressiveness was the presence of mass-produced ornamentation, which allowed even the vernacular builder to add a flourish to his building. Although this embellishment was largely a matter of selection rather than creation, the range of available ornament was larger than before. The corner house at 80 Sciarappa Street was a good example until it was covered with aluminum siding a few years ago (Fig. 190). Built by a local carpenter, Charles Pendexter, in 1846–47, this house featured paneled corner pilasters, pedimented window trim, and an elaborate second-floor cast-iron balcony on Thorndike Street. In earlier periods, such a modest house would probably not have had a balcony, but by 1846 cast-iron balconies were within a modest budget. Other cast-iron balconies of the period occur at 51–61 Otis Street (1851) and originally at 100 Otis Street (1848–49) (see Figs. 207 and 209).

Columned entrance and side porches abound in Cambridge's Greek Revival houses; their fluted columns and intricate capitals are the kinds of elaborate ornament that could have been used earlier only in the most expensive work. Hollow-core columns 10 feet tall, for example, cost $3.60 in James Gallier's *Price Book for Estimators* of 1833, and Doric capitals could be assembled from stock turned and shaped by machinery.

Most surviving examples of columned Greek Revival houses in East Cambridge use Ionic capitals and fluted columns (Fig. 191); a few domestic examples of the simpler Doric capitals exist (Fig. 192), but none of the more elaborate Corinthian capitals, such as those used in the 1848 remodeling of the old Superior Courthouse. Few East Cambridge columns had plain shafts; most were fluted. A few examples of reeded columns also exist (69 Thorndike Street, 1844, and 80 Thorndike Street) but this treatment was unusual in East Cambridge (see Fig. 197).



191. Detail of Ionic capital and fluted column, 42 Second Street, 1842

192. Detail of Doric capital and plain column, 98 Otis Street, c. 1845

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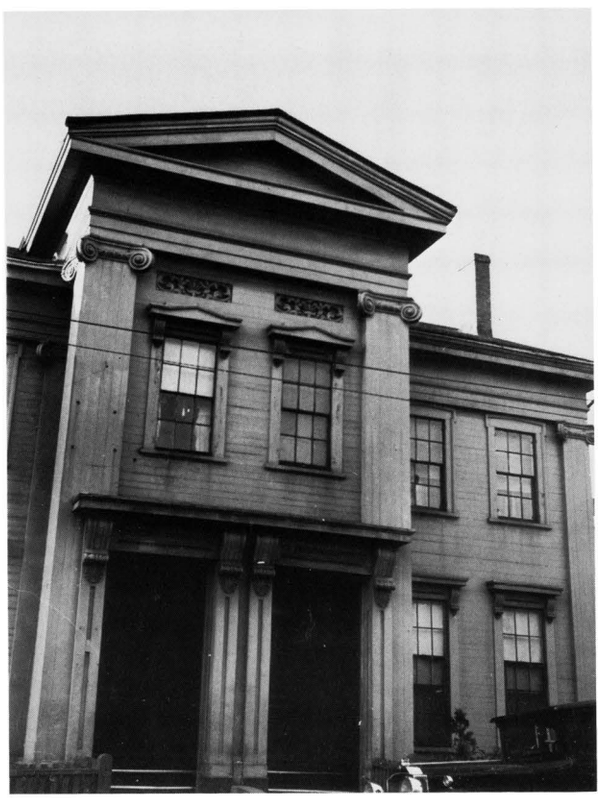
193. London putty decoration, in recessed entrance, 66–68 Otis Street, 1846–47. Photograph 1964

Some houses of this period also include bas-relief decoration. While resembling hand carving, this decoration was often made from "London putty," which could be formed in a mold (Fig. 193). When hardened, glued in place, and painted, it can scarcely be distinguished from expensive, hand-carved work, and it was used for both exterior and interior decoration in East Cambridge, as in the window corner blocks on 67–69 Otis Street (1839).

The best example of the exterior use of this material in East Cambridge is 66–68 Otis Street. As originally built in 1846–47 by William Hall, a lumber dealer, and Andrew Jones, a mason, this T-shaped house was the most elaborate double Greek Revival house in East Cambridge, combining both unusual ornament and stock Greek Revival elements (Figs. 194–195). Ornamentation was concentrated on the projecting entrance bay, which has monumental two-story corner pilasters with Ionic capitals and is surmounted by a Classical entablature and pediment; the ends of the house display the same treatment with corner pilasters and pediments. The second-story windows on the entrance bay had the most elaborate detail, with pedimented caps supported by consoles and decorated rectangular panels above, while the second-floor windows on the main part of the house had simpler pediments. The long first-floor windows had projecting mouldings supported by similar decorative consoles. The facade of the house was unfortunately stripped of much of its original decoration in the 1940s and covered with sid-



194. 66–68 Otis Street, 1846–47. Photograph c. 1935

195. 66–68 Otis Street, after siding. Photograph 1964

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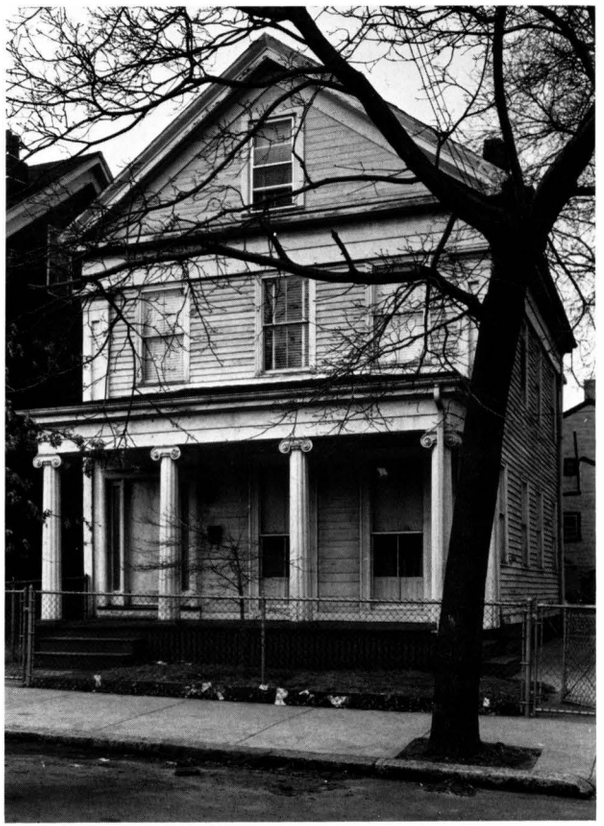

196. 69 Thorndike Street, 1844. Photograph 1970 showing original clapboards

197. Porch detail, 69 Thorndike Street. Photograph 1964

198. 102 Thorndike Street, 1844. Photograph c. 1935

ing; only the recessed entrance, with paneled pilasters, decorative consoles, pediments, and entablatures, remains as evidence of the house's former glory.

By the 1840s, the earlier worker's cottage with a center-hall entrance facing the side yard began to lose favor, and the Greek Revival house with a side-hall entrance in the gable end facing the street became the most common house type in East Cambridge. Built usually of wood, these houses rose one, two, and occasionally three stories, but two stories was most common. Porches in this period varied in both type and placement. There were recessed and projecting porches, small entrance hoods, and large verandas; the latter were placed all the way across the front or along the flank, though side porches were less common because of East Cambridge's narrow lots. The number and variety of Greek Revival porch designs found in the area make them particularly noteworthy and indicate the many variations on a standard theme that are typical of vernacular architecture.

One of the best examples of a Greek Revival single house in East Cambridge, before it was covered with aluminum siding, was 69 Thorndike Street, built by Moses Bates in 1844 (Fig. 196). The original character of the house is evident in photographs taken in the 1960s, when the house was maintained with much sensitivity to its architectural detail. Three bays wide, with the entrance pushed to one side, the facade readily explains the interior of the dwelling. Floor-length windows on the ground floor and smaller ones above (some retaining the 9-by-12-inch lights) are characteristic of the period. The corner pilasters give a sense of completeness to the facade; a comparison with some of the other facades on the block shows how much is lost when such decorative accents are removed. Flush siding on the facade emphasizes the importance of the pilasters and recalls the ashlar construction of the Greek prototype. The gable suggests a Classical pediment with the horizontal cornice carried across the facade. The pitch of the roof is a compromise between the prototype and Yankee practicality; a slope as low as a proper Greek pediment would not allow sufficient headroom in the attic. Finally, a good front porch across the whole facade displays quite "correct" Ionic capitals,

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although with curious reeded columns; the reeded pilasters framing the main entrance are a 1940's replacement (Fig. 197). All in all, this was a textbook example of a single-family Greek Revival house of the 1840s. Many simpler two-story examples had no projecting porches, but such features as paneled corner pilasters, handsome pilastered entrances, and proper pediments gave these houses a dignified appearance (Fig. 198).

Several more unusual variations of the Greek Revival two-story house, such as 93 Otis Street (1842–43) and 74 Thorndike Street (1843–44), are also important in East Cambridge's architectural development. Although it follows the typical two-story side-hall plan with rear ell, 93 Otis Street is an unusually imposing house for East Cambridge (Fig. 199). It is set well back on its spacious lot, unlike its neighbors, which are built close to the sidewalk. This lot was part of the four blocks around Otis and Fourth streets that the Lechmere Point Corporation had initially reserved because they constituted the highest point of land in East Cambridge, and the proprietors felt they would become the most desirable when the area began to develop.

In 1842, the 41-by-100-foot lot on Otis Street was purchased by Royal Pomeroy Deshon, a housewright who apparently came from Maine but who had been working in East Cambridge since about 1838. He built 93 Otis Street in 1842–43 for himself, no doubt in anticipation of his marriage in 1843. His only other documented work in Cambridge is St. John's Church on Fourth Street, for which he contracted in 1842 to construct the frame, roof, and other woodwork, but he probably worked on many other houses during the 1830s and 1840s, when the area was growing so rapidly.

Deshon was extremely competent and spared no expense in making his own house architecturally distinguished. The facade of 93 Otis Street is divided into three bays by paneled pilasters below the main gable, which is treated as a pediment, suggesting the temple front that was the ideal of the Greek Revival style. The pilaster treatment continues around the sides of the building, an elaborate touch for the area and the only example known in East Cambridge. Deshon also took full advantage of the lot's elevation and crowned his house with a large hexagonal cupola articulated with paneled pilasters and a complete entablature.

199. 93 Otis Street, 1842–43, Royal Pomeroy Deshon, housewright

Deshon died in 1848, and the following year the house was sold to Horatio Hovey, a distinguished figure in his time. He came to the area in 1824, at the age of nineteen, and worked as a clerk in Atherton Stevens' grocery store until 1839, when he opened his own grocery. A pillar of the East Cambridge business community through most of the 19th century, Hovey retired in 1886 but continued to live at 93 Otis Street until his death, in 1899. Siding now covers the house, obscuring much of its original detail.

More unusual in form is the T-shaped house at 74 Thorndike Street, with its open two-story corner porches and pedimented gable echoed in the shape of the gable window (Fig. 200). Built in 1843–44 for Peter Wellington of Lexington, the house's two-story pilasters and square porch posts, as well as its unusual form, set it apart from its more conventional neighbors (Fig. 201).

While most Greek Revival houses in East Cambridge had two stories, houses of a single story were not necessarily less stylish. One of the most delightful one-story Greek Revival houses was built in about 1845

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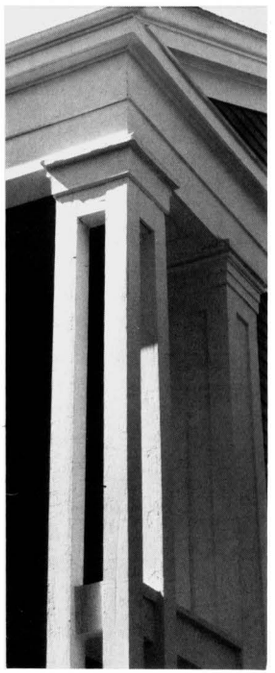
200. 74 Thorndike Street, 1843–44

202. 318 Hurley Street, c. 1845. Photograph 1964

203. 111–113 Thorndike, c. 1845. Photograph 1970

201. Detail, 74 Thorndike Street



and moved to its present site at 318 Hurley Street in 1872 (Fig. 202). With pilaster strips and a complete entablature carried around the sides as well as on the front, this house was more elaborately trimmed than many larger structures in the Greek Revival vernacular. Unfortunately, it has now been covered with aluminum siding, but the original doorway remains. The entrance is a complete composition, with Ionic pilasters framing the door and lights, and the architrave is scored with two lines to recall the three-part architrave of the Ionic order.

Many of East Cambridge's Greek Revival houses are double rather than single houses. A double house differs from two adjacent row houses in that it has windows in three outside walls rather than two. Two different plans were followed: two side-hall houses set side by side and entered from the street or two center-hall or side-hall houses set back to back and entered from the side yard. The main gable could be set facing either the street or the side yard. If the gable faced the street, the entrances faced the side yard, as at 111–113 Thorndike Street (Fig. 203). If the gable faced the side yard, the house could have either paired entrances facing the street, such as 67–69 Otis Street (1839) and 103–105 Otis Street (1843–44) (Fig. 204), or an entrance in each gable end, such as 126–128 Otis Street (1844). An unusual variation was the use of an entrance pavilion and cross gables, as at 66–68 Otis Street (1846–47), a house already noted for its elaborate ornamentation (see Fig. 194).

The two-and-a-half-story frame house at 67–69 Otis Street (1839) is a good example of a Greek Revival double house, with paired doors and gables flanking the street (Figs. 205–206). The original owner, Abiel Goss, was a carpenter who built the house with corner pilasters, a full entablature, and a one-story porch facing the street. For years the house stood in ruinous condition, but it was completely restored in 1985–86 (except for the porch columns, which should have been fluted with Ionic capitals) and is once again a good example of this type.

While most of the area's Greek Revival houses were built of wood, several handsome brick examples survive. Builders of masonry Greek Revival houses

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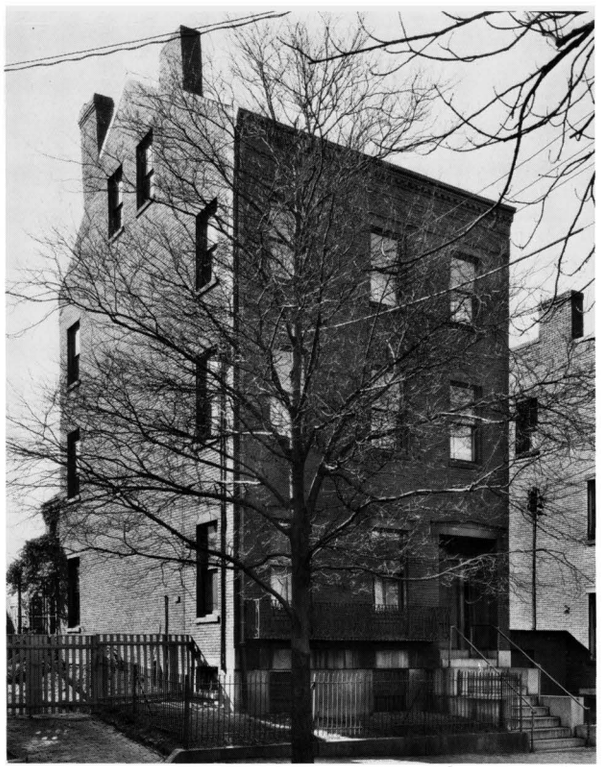
showed a preference for granite foundations, brownstone lintels, and pressed-brick facades. The pressed brick is more salmon-colored, with a harder surface, and sharper edges than the common brick used for other walls. Brick joints are thin (about 3/16 inch) and raked, and the mortar was often darkened with lampblack.

One of the best examples is the freestanding single brick house at 100 Otis Street, built in 1848–49 for Oliver Taylor (Fig. 207). The pressed brick and three-story height of this house give the facade a rather stark, formal appearance that is reinforced by the shallow brownstone pediments over the first-floor windows and the main entrance, which constitute the major ornamentation. Originally, a handsome cast-iron balcony ran

204. 103–105 Otis Street, 1843–44

205. 67–69 Otis Street, 1839. Photograph 1984

206. 67–69 Otis Street in 1987 (after restoration)



207. 100 Otis Street, 1848–49. Photograph c. 1920

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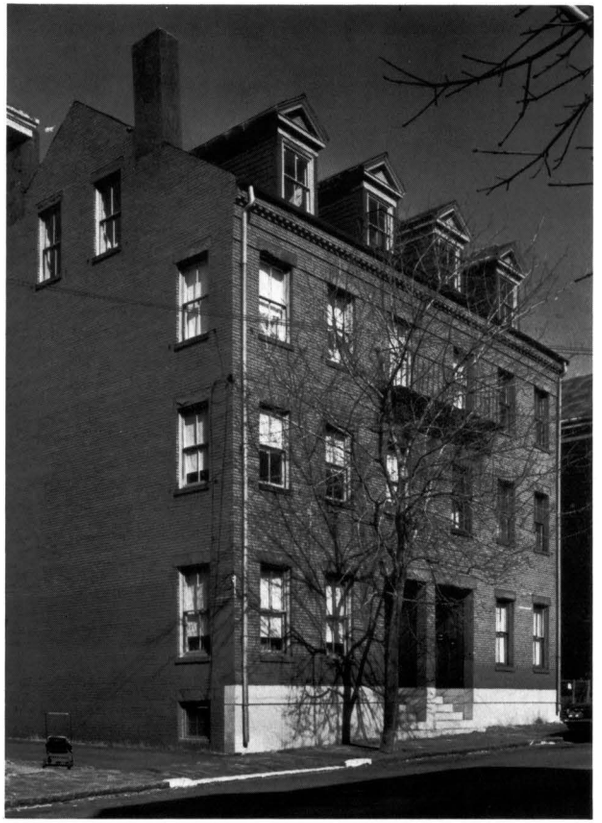

208. 131–133 Spring Street, 1855. Photograph 1970

209. 55–61 Otis Street, 1851, William A. Hall, builder

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in front of the first-floor windows; this has unfortunately not survived.

The elaborate brick houses at 131–133 Spring Street provide an excellent example of a masonry Greek Revival double house with paired entrances facing the street (Fig. 208). Described as "first class" in the *Cambridge Chronicle* in 1855, when they were under construction, these three-story houses built of pressed brick for William Needham have a high granite base, brownstone trim, and recessed entrances. Dormers on both the facade and the wide double ell are capped by full Greek Revival pediments, giving them a stately character similar to that of the brick rows on Second Street (see Fig. 161).

In addition to its single and double houses, East Cambridge has many Greek Revival row houses, both brick and frame. All row houses follow the same fundamental plan as the typical single house: they are three bays wide, two rooms deep, and have a side hall with a stair; there may or may not be an ell. Any variety in row house design results from the building material, the height to which it is carried, the degree of decoration, and the placement within the row (the end houses were often slightly wider than the others).

One of the most striking rows that survives is 55–61 Otis Street (1851) (Fig. 209). The date is significant, for the same houses could have been built on Louisburg Square in Boston twenty years earlier. If they had an architect, his name is not important, since he merely repeated a familiar pattern. The builder and first owner was William A. Hall, a lumber dealer and entrepreneur who developed several groups of dwellings in East Cambridge. Valued at $5,500 when built, each 25-foot-wide house contained four formal rooms (parlor, library, dining, and reception rooms), seven bedrooms (three of them small), and services (kitchen, storage, furnace, and halls). The fourth stories of the two middle houses were added in 1903.

The complete brick entablature of the facade and the square-headed entrance are typical of Greek Revival row houses. The elongated windows of the second floor are in proportion to the 11-foot ceilings and identify the drawing rooms on the *piano nobile*. The interiors have fine marble mantels, and the wood trim is impressive.

210. 36–46 Second Street, 1842, Jesse A. Hall, builder

The doors on the main (second) floor are more than 8 feet high and are surrounded by excellent architrave mouldings with crossettes. The front parlors have plaster ceilings with recessed panels as fine as Greek Revival craftsmen could devise. Number 61 has been carefully restored, and could provide an example for others in the row.

A comparison of this block with five other groups of Greek Revival row houses and their assessed values at the time of their construction underlines their basic similarities as well as the variations in detail and value that were possible within the formula. Somewhat earlier and less costly than the Otis Street row is the block of six frame dwellings at 36–46 Second Street (1842) built by Jesse A. Hall, a lumber dealer and one of the most prominent figures (like his son, William) in early East Cambridge real estate (Fig. 210). Two stories high and lacking ells, these houses each contain two formal rooms on the first floor, five bedrooms, and services. As they are set on a hill, each house has a kitchen in the basement, which is on the same level as the back yard; an early photograph taken from Boston shows that the houses backed directly onto the tide flats (see Fig. 36). Except for party walls of brick, the houses are built of wood and vary in width from 21 to 26 feet. When completed, each house was taxed at $2,000. This row has very good exterior and interior woodwork: projecting Ionic porches, intricate front stairs, a scroll newel post, and handsome interior trim, although the wooden mantels in the parlors and dining rooms seem unusually plain.

In 1856, the first year in which the Cambridge directory consistently listed house numbers, the residents of 36–46 Second Street included a clergyman,

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211. 67–75 Spring Street, 1847

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212. 72–78 Spring Street, 1845. Photograph 1964

213. 84–92 Spring Street, 1844. Photograph 1964

an attorney, and four dealers in lumber, wood and coal, and produce, as well as a salesman for one of the glass companies. The residents of this handsome block were primarily professionals and substantial businessmen, similar in occupational class to the builder and owner, Jesse Hall, who lived at 36 Second Street until his death in 1860.

Three blocks away at 67–75 Spring Street (1847) are five frame houses built by Thomas Norris and valued at $2,100 each (Fig. 211). Most of the houses are 22 feet wide, but the one on the end is 31 feet. The facade has a simple entablature, recessed entrance porches, and single pilasters at the corners of the row. The houses have good marble fireplace surrounds, elaborate scroll-type stairs, and rear ells to provide additional service space and bedrooms. The residents of this row in 1856 were primarily skilled and semiskilled craftsmen, but they also included a wood and coal dealer and a shoestore owner.

Across the street at 72–78 Spring Street (1845) is a row of four dwellings by the same builder, Thomas Norris (Fig. 212). Their lower valuation of $1,605 can be explained by the narrower lots (21 feet), and simpler facades, with neither pilasters nor entablature but only projecting paired porches supported by simple Doric columns. These are some of the few columns of this style in East Cambridge. Unlike 36–46 Second Street, in which each house has an individual columned porch, here the porches have been paired, reducing the amount of ornamentation, and the houses are mirror images of each other. Like the row across the street, these houses were occupied in 1856 primarily by skilled craftsmen: carpenters, a blindmaker, and a pump and block maker.

By comparison, the simplified row of five 20-foot-wide houses at 137–145 Otis Street (1851) has neither projecting porch, entablature, nor columns, and inside it lacks the characteristic scroll newel post and marble mantels. Although each house is two stories high, the ell has only one story, reducing the number of rooms. Their similar valuations of $1,600 can only be explained by rising prices at this later date.

Last in the comparison is the five-house row at 84–92 Spring Street (1844), which is also narrow but lower, with only one story to the main entablature (Fig. 213). Following the same basic side-hall scheme but reduced to living room, kitchen, and three bedrooms, each house was valued at only $500 when it was built. Like much of Spring Street, this row was occupied in 1856 by skilled and semiskilled craftsmen: carpenters, an organ builder, a brushmaker, and two pyrotechnists, who were making fireworks on an island in the marsh south of Charles Street.

An important interior feature of the average East Cambridge Greek Revival residence, whether a detached house or part of a row, was the stair. Three kinds are found. The most elaborate curls both the

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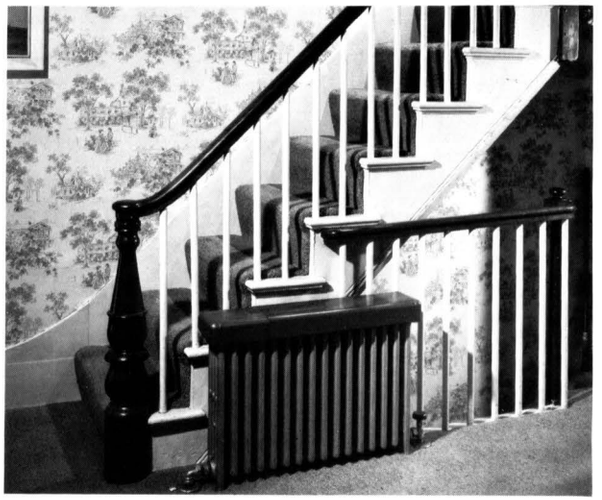
214. Stair, 61 Otis Street, 1851. Photograph 1964



215. Newel post, 84–92 Spring Street, 1844. Photograph 1964

handrail and bottom (curtail) step into a scroll about the newel post (Fig. 214). The rounding of the curtail step and handrail is reflected in the bowed contours of the three or four steps above, and together they create a graceful, cascading effect at the bottom of the flight. Sometimes, as at 36–46 Second Street, the risers form an oblique angle with the wall rather than the usual 90-degree angle, which gives something of the effect of a spiral stair. Toward the top, the stairs again bend easily in a quarter circle, and the rounding movement is repeated in the wall, strings, and handrail. The handrail curves in this manner at each floor and flows from top to bottom without interruption. Balusters are simple, rounded, and sometimes slightly tapered. The elaborate scroll newel goes back to Bulfinch's work on Beacon Hill, and it was used continuously in the most expensive residential work in East Cambridge, Cambridgeport, and Dana Hill until the Civil War. Its appearance, therefore, is not confined to Greek Revival houses.

216. Back stairs, 46 Second Street. Photograph 1964

An intermediate stair design uses straight runs for the strings and handrails and employs a heavy newel post with a potbellied profile (Fig. 215). Turned from a 5-inch timber, this design avoids the polygonal faces that became popular after the Civil War, but it also lacks the grace of the earlier scroll design. The potbellied newel appeared in East Cambridge in the mid-forties, and was used through the sixties. It was used for the upper floors in elaborate houses or for the first-floor newel in simple houses after about 1845. The newel and handrail were usually finished in a dark natural wood, but the simple round balusters were painted.

The third and simplest stair design uses the same straight runs and handrail just described but an even simpler newel post (Fig. 216). It is, indeed, nothing more than the 3-inch post with nicely turned knob and shank that was used in early Georgian buildings. In Greek Revival houses, this newel design is used for the back stairs in expensive houses, for the upper floors in moderately priced dwellings, and for the first-floor stair in the very simplest interiors.

Another central feature of the Greek Revival interior was the parlor fireplace, which incorporated a coal grate, a conventional hearth for burning wood, or a hot air register. The most common mantel of the 1830s and '40s is made of black marble and follows a severe, rectilinear form. Later, more elaborate rooms had gray or white marble mantels; the most elegant example is the gray marble composition decorated with anthemion shapes in low relief in the main parlor at 61 Otis Street (Fig. 217). The chimney breast against which the mantel is placed almost always projects into the room and is emphasized by the plaster cornice brought forward around it. In upper bedrooms and in simpler houses, the mantel casing is of wood, while some unimportant rooms have only a wooden shelf above a tiny fireplace or flue opening.

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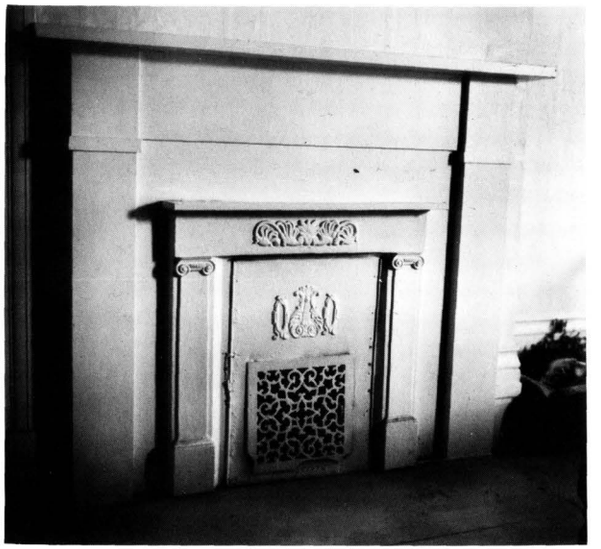
217. Parlor fireplace, 61 Otis Street. Photograph 1964

218. Doors connecting parlors, 69 Thorndike Street, 1844. Photograph 1964

The interior woodwork of these houses is also worthy of mention. Again, the degree of elaboration of the wood trim differs with the cost of the house and the relative importance of the room, but it is always composed of stock items. The most expensive door and window trim contains shallow recessed panels with inset rosettes or anthemion designs and often crossettes in the upper corners. Since the woodwork is always painted, it is hard to tell that this ornamentation is often a casting made of London putty and not hand carved. The window and door frames of important rooms often have a projecting cornice or a pedimented lintel to add richness (Fig. 218). As in the 18th century, such rooms provide recesses in the window jambs for inside shutters. Bedrooms and service rooms use less complicated woodwork, but the door and window casings are generally accented with mouldings of some complexity, and the corners of the frames often have a square projecting lintel block.

A final matter concerns the heating and cooking arrangements and mechanical equipment of these houses — a somewhat difficult topic since the original facilities have all been replaced. Through the 1830s, houses were warmed with wood burned in fireplaces in the principal rooms; cooking was done in fireplaces and brick ovens in the cellar. Iron stoves came into use about 1840, and shallow, coal-burning fireplaces equipped with iron grates appeared in East Cambridge in about 1845. Thereafter, less important rooms merely had an outlet through which a stove pipe connected with the chimney flue. Meanwhile, the brick oven was brought up to the first floor, and the kitchen fireplace was soon replaced with an iron range.

Although expensive, a central hot air furnace could be found in large Boston area dwellings by 1840. At first, hot air ducts were provided to rooms only on the two lower floors, sometimes to only the first one; upper chambers or those in the ell would have individual grates or stoves. Beginning in the 1840s, large houses with furnaces on Dana Hill often omitted fireplaces in the individual rooms. In East Cambridge, the transition to central heating is unclear. While most of the houses inspected that dated from 1820 to 1870 had fireplaces or stove outlets in all the rooms, some had hot air



219. Second floor fireplace with hot air register insert, 67–69 Otis Street, 1839

furnaces at a very early date. At 67–69 Otis Street (1839), the installation of a hot air furnace evidently took place early enough that the register insert of pressed tin in a bedroom fireplace is a complete Greek Revival entablature with Ionic pilaster capitals and anthemia (Fig. 219), while at 69 Thorndike Street (1844) the parlor fireplace was converted to a register with a marble insert that matches the veined black marble mantel. The consistency of style and material make it unlikely that either conversion could have occurred after 1850.

Plumbing has been subject to even more updating, and it seems safe to assume that no unaltered bathroom or toilet facilities exist. According to the descendants of Oliver Taylor, the house at 100 Otis Street (1848–49) had the first full bathroom in East Cambridge. Such plumbing installations depended on private wells and cesspools, however, since Cambridge did not start a municipal water system until 1852 or a sewer system until the middle 1850s.

A company to produce illuminating gas was franchised in 1852. Electric lines were strung through East

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Cambridge in 1887, but electricity was brought into houses at widely different times. The house at 59 Otis Street, for example, did not have electricity until 1922.

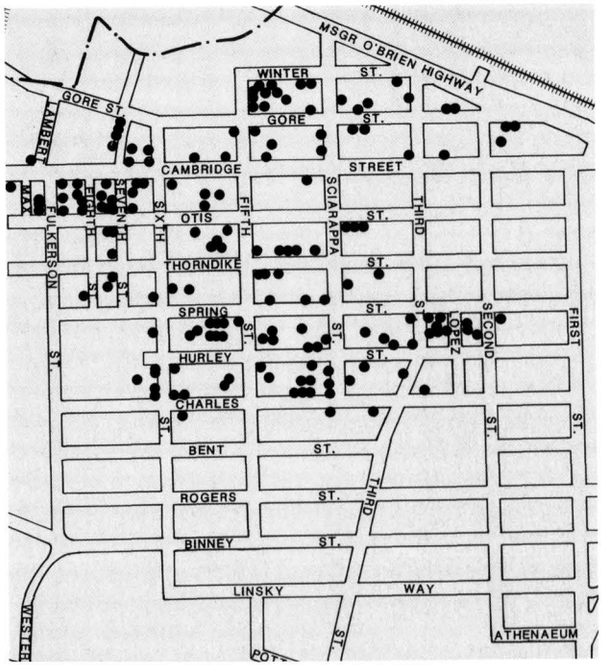
Italianate-Bracketed, 1855–75

A large structure and plenty of land were needed to display the irregular massing and picturesque setting of the full Italianate style. In small buildings, the enthusiasm for the Italianate fashion was satisfied by an overlay of bracketed ornamentation on the facade of a house that was not notably different from the Greek Revival. In the course of the 1850s, the decorative bracket became the symbol of being up to date, and such ornamentation displaced the Classical forms of the Greek Revival.

During this period, numerous Bracketed houses were built in East Cambridge. Most of them followed the side-hall entrance plan with the gable end to the street that had been established in the Greek Revival period, but they added the new style of ornament, including the characteristic decorative brackets (Figs. 220–221). The massing tended to emphasize the vertical more than in Greek Revival times; interior ceiling heights increased, and the roof slope was slightly steeper than before. The house mass became more plastic as well: the overhang of the cornice was emphasized by decorative brackets, and projecting bay windows, almost never found in Greek Revival work, were often used. Windows showed more variety, and windowpanes are usually larger than in the preceding period; two-over-two sash became common. Windows and doors were emphasized by the addition of projecting cornices and sills were supported by yet more brackets. Sometimes these cornices assumed the proportions of hoods. This growth in plasticity was not confined to Bracketed buildings alone, but was part of the gradual change in 19th-century architecture that first became noticeable in Greek Revival work and reached a climax in the Queen Anne style of the 1880s.

Other characteristics of the Bracketed style include round-headed windows, which almost always appeared in the facade gable and often in bay or oriel windows

220. 109 Thorndike Street, 1857–58



221. Italianate houses in East Cambridge

(Fig. 222). At front entrances, the earlier Greek Revival single door with side lights was replaced by double doors with two round-headed glass panels, often of etched or cut glass. Classical features were rejected by builders and clients alike as old-fashioned. Gables were no longer treated as pediments with a horizontal cornice carried across the facade at eave level, although an occasional holdover of this feature can be found in Bracketed work, as at 134 Otis Street (see Fig. 229). Pilasters were discarded in favor of quoins or simple corner boards. Classical columns were less in evidence than before, as porches were carried on plain square posts that were often paired and connected by arched wooden tracery (Fig. 223).

Although primarily associated with the Italianate/Bracketed style in the late 1840s and 1850s (the 1850s and 1860s in East Cambridge), bracket decoration long continued to be a popular element of architectural design. First devised by architects in about 1840, the

222. Gable, 134 Otis Street, 1868–69. Photograph 1964

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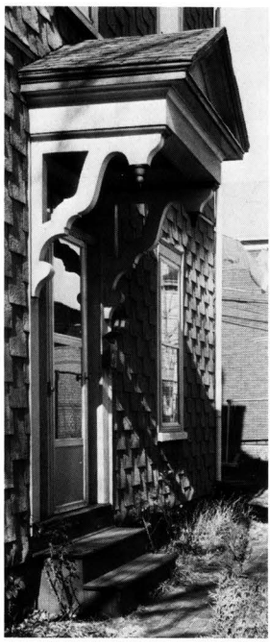
223. Porch detail, 131 Otis Street. Photograph 1964



224. Bracketed door hood, 129 Otis Street, c. 1865. Photograph 1964

bracket motif soon entered the vernacular and continued in use for about fifty years, although the actual design of the brackets evolved over this period. Inexpensive to manufacture and easily installed, brackets dressed up a building considerably; some of the most elaborate brackets occur under door hoods, many of which were added in the 1870s and 1880s to update earlier houses (see Figs. 227–228). Thus, the presence of brackets is no sure indication of date nor of designation of a building as Italianate or Bracketed style.

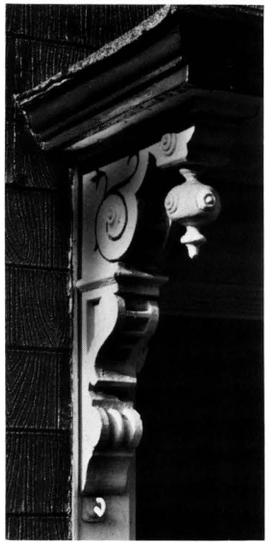
The vernacular architecture of East Cambridge contains no examples of the earliest bracket designs, but three stages in their development can be distinguished. The first brackets were moderately large and fashioned of heavy, solid pieces of timber. Often the center of the composition was left open since the bracket was made of three members: a vertical, which abuts the wall, a horizontal piece, which supports the overhang, and a long strut, which usually assumes a curvilinear profile (Fig. 224). Turned work in moderate amounts is found in the form of pendants. In gables, the brackets hang vertically, but the edges are parallel to the angle of the raking cornice.

After the Civil War, brackets were still large but the center area was generally solid (Figs. 225–226). More important, these brackets, which could still be very thick, were actually built up of a number of 1-inch boards, each of which was easy to shape independently before being nailed together. To achieve decoration, the outside boards were often cut with a jigsaw; another method used sections of turned wood cut in half and applied to the surface; a third used ½-inch boards cut in intricate shapes and applied to the bracket sides as a kind of low relief. All ornamentation was machine-made, and the decorative effect depended on a general richness and profusion of detail rather than on subtleties of hand execution. Standard designs were produced in quantity and used in abundance throughout East Cambridge.

The last phase of bracket design occurred after 1880. A few medium-size brackets used on hoods over doors have turned or chamfered struts, but most brackets of this period are relatively small. By this time the bracket had declined in fashion and was used only in the cheapest kind of building where a semblance of decoration was desired. Jigsawn and applied details were still used, but the decorative shapes show an indebtedness to the Queen Anne movement with reeded intrados or fanlike designs in the sides (Figs. 227–228). Finally, in about 1895, the bracket disappeared entirely, its function having been usurped by more elaborate stamped metal cornices and Colonial Revival modillions.

East Cambridge has several good Bracketed houses of relatively modest size. Most of them date from the late 1850s and 1860s, although some row houses in the same style were built after 1873, showing how popular this style continued to be.

One of the finest side-hall Bracketed houses is 134 Otis Street, built in 1868–69 for Benjamin Hoyt, a partner in the very successful granite business of A. C. Sanborn & Company, located on the wharves near Craigie's Bridge (Fig. 229). The main gable of the



225. Bracket, 122 Gore Street, 1870–71

227. Bracketed door hood, added 1880s, 129 Thorndike Street, by 1868

226. Bracketed door hood, 133–135 Otis Street, c. 1875

228. Bracketed door hood, added 1880s, 124 Thorndike Street, 1841

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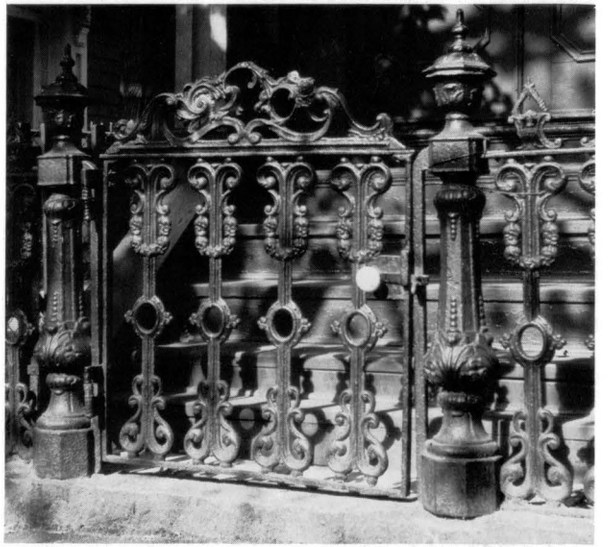
229. 134 Otis Street, 1868–69. Photograph 1965



230. Cast iron fence, 109 Thorndike Street, 1857–58. Photograph 1964

house contains the style's characteristic round-headed window and bracketed cornice, while the front entrance provides a textbook example of this style, with double doors, decorative glass, and a projecting hood supported by large decorative brackets. Set directly on the sidewalk on a narrow lot, the house concentrates its main ornamentation on the street facade; the sides have much plainer window trim, although the dentil cornice with paired brackets continues around the sides. The house remains in excellent condition, complete with original shutters and clapboards, and is an important asset to the neighborhood.

Built ten years earlier, 109 Thorndike Street (1857–58) follows a similar form but with very plastic ornamentation, including heavy window cornices and sills supported by brackets and a bracketed entrance hood (see Fig. 220). A second-story bay over the door further emphasizes the main entrance, which is deeply recessed and has the characteristic double doors and decorative glass panels. Equally robust in design is the ornate cast-iron fence and gate in front of the house, an unusual survivor (Fig. 230). Although the clapboards have been covered with asphalt siding, the house re-

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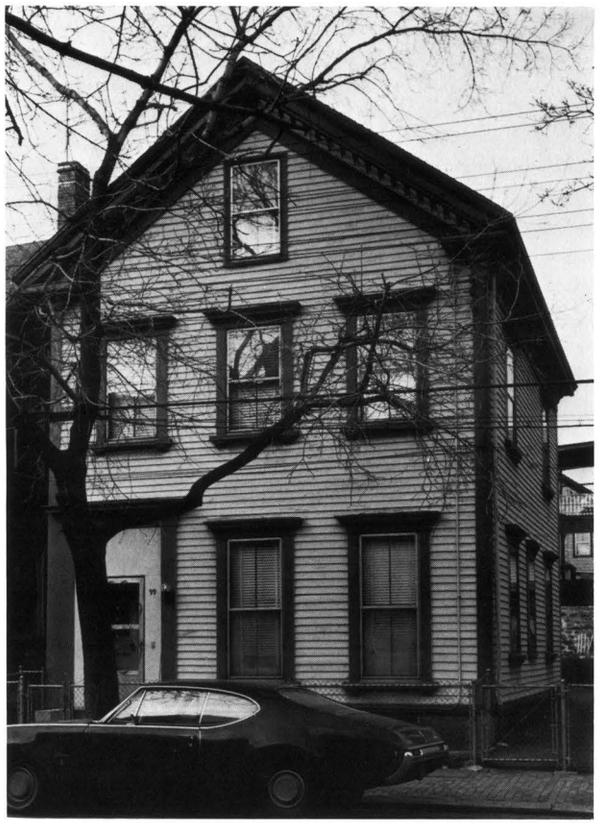

231. 99 Thorndike Street, 1857. Photograph 1970

232. 83 Winter Street, before 1854. Photograph 1970

233. 400 Cambridge Street, 1857. Photograph 1969

tains all of its original ornament in good condition and is a valuable example of this style. Built by Charles Eaton, who worked in Boston, it was sold in 1860 to Charles Stevens, a clerk at the Registry of Deeds, and in 1877 to Louis Vaupel, the chief engraver at the New England Glass Company. By 1877, the Bracketed style was no longer really current, even in East Cambridge, but Vaupel, according to his diary, judged the house well constructed "of the best material" and a highly desirable place to live.

Other, simpler houses, such as 99 Thorndike Street (1857), 116 Thorndike Street (1865-66), and 84 Winter Street (by 1873), followed the same side-hall form and style but had brackets only supporting door hoods, not at the cornice level. The house at 99 Thorndike Street originally had dentils instead of brackets in the cornice, but it has been so stripped and covered with inappropriate siding that its style is now barely discernible (Fig. 231). By contrast, 116 Thorndike Street remains in good condition, and though simpler than the examples discussed above, exhibits many characteristic features of the Bracketed style: a round-headed window in the gable end, a short horizontal cornice return, a second-story bay and entrance brackets (Fig. 232), and turned brackets supporting a deep entrance hood. Even simpler are 83 Winter Street (before 1854), with its second-story bay and entrance brackets (Fig. 233), and 84 Winter Street, with only a bracketed entrance hood.

While most Bracketed houses from this period rise two and a half stories and have gable roofs, some, such as 400 Cambridge Street (1857), are a full three stories high and have a flat roof outlined by an overhanging bracketed cornice, which extends slightly around the top corners of the facade but does not continue along the sides of the building (Fig. 233). The three-story double house at 80–82 Otis Street (1861) seems to follow an earlier form, with paired end chimneys and pedimented dormers, but the oriel windows supported on large consoles and the incised brownstone window lintels betray its later date (Fig. 234).

After 1873, several long rows of wooden houses and large square brick buildings in the Bracketed style were

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234. 80–82 Otis Street, 1861

235. 110–112 Gore Street, 1873–75. Photograph 1970

built in East Cambridge to meet the rental housing needs of the growing population. These rows were primarily three-story flat-roofed buildings in which a bracketed cornice and recessed entrances with bracketed hoods provided the only ornamentation. Such brick buildings occur at 110–112 Gore Street, built between 1873 and 1879 for Charles Linnehan, a well-known East Cambridge landlord (Fig. 235). The wooden rows were generally built on the peripheral streets, such as Sixth, Seventh, and Spring streets and Max Avenue (formerly Parnell Street), where larger plots of land were still available. Typical are the Bracketed rows at 1–19 Seventh Street (1873), built by the heirs of John A. Ellis (Fig. 236), and 52–60 Spring Street (1879–80), built by a local carpenter, F. H. Stickney. Similar rows were built by 1873 for Charles Linnehan along what is now Max Avenue, on the very western edge of the neighborhood.

The interiors of most Bracketed dwellings in East Cambridge follow a side-hall plan with double parlors and a dining room and kitchen in the ell, but there is some variety in the relations of these rooms. Sliding doors connecting parlors were no longer as popular as in Greek Revival times. The houses at 134 Otis Street and 116 Thorndike Street combine the two parlors into a single room (Fig. 237). Double parlors remain at 107 and 109 Thorndike Street, but they are connected by a conventional door placed off center to allow more flexibility in the use of the rooms. The second floor generally contains three large bedrooms, a small "hall room" over the front door, and a servant's room over the kitchen; two finished rooms and two large storage closets are in the attic.

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236. 1–19 Seventh Street, 1873

Stairway designs show important changes. The scroll newel post of earlier times was abandoned in favor of a stout, turned newel post that is similar to the pot-bellied newels of medium-priced Greek Revival construction (Fig. 238). However, the later newels are larger (8-inch diameter) and the mouldings heavier, and they usually stand on an octagonal base. The handrail is wider, with a more complex profile, and the balusters are thicker and elaborately turned. Although both stairs and rail turn at the head of the flight, the graceful, sweeping quality of earlier designs is gone.

Marble mantels continued to be popular and those in East Cambridge houses show only minor differences from earlier ones (Fig. 239). Almost all are equipped with round-headed coal grates or hot-air registers, and the mantels of gray and white marble use more intricate mouldings. All of these mouldings, however, could be cut by machine.

The house interior underwent a marked change in feeling as dark-stained woodwork replaced the light, painted surfaces of Greek Revival times. Even in mod-

237. Parlor, 134 Otis, 1868–69. Photograph 1964

238. Newel post, 109 Thorndike Street, 1857–58. Photograph 1964

239. Fireplace, 109 Thorndike Street, 1857–58. Photograph 1964

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est houses, the quality of the wood used for doors and trim is very good. Ceilings are higher, and the plaster cornices are heavier than before. Molded plaster rosettes set in the center of the ceilings of important downstairs rooms are quite ornate. After the Civil War, gas outlets became usual, and newel posts on the main floor were often drilled to accommodate a lamp.

Another characteristic of these Bracketed houses is the decorative glass that is found in the front doors and sometimes in interior doors and windows as well. Often the design is only etched, but sometimes it is both cut and etched. Designs range from diaper patterns to fruits and flowers. Light coming into the somber interior through the facets of cut glass and small areas of clear glass forms a sparkling complement to the Victorian interior. These decorative glass panels were probably produced at the New England Glass Company or the Bay State Glass Company in East Cambridge, but this cannot be proved. The side lights of a few Greek Revival houses also contained decorative glass panels, but they were generally etched, not cut.

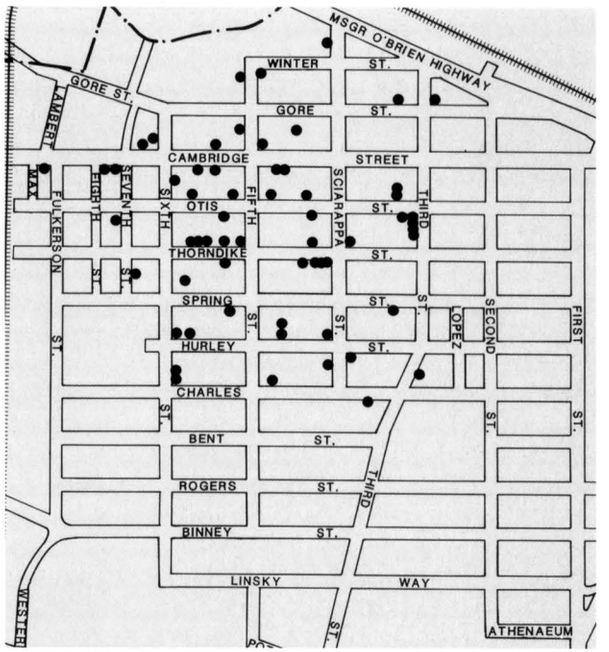
Mansard, 1860–75

East Cambridge's best residential architecture was erected before the Civil War. At that time, the area retained a pleasant, uncrowded quality, and the most desirable lots on the gentle slopes of Putnam Hill were filled with substantial dwellings. After the war, there was a trend toward less expensive, multifamily houses in which the space allotted to an individual family was significantly reduced. The more crowded conditions and lower standards of construction for these new buildings were not conducive to outstanding architecture. As a result, the later 19th century styles are not as well represented in East Cambridge as in other parts of Cambridge. Fortunately, several interesting Mansard houses built here in the 1860s and 1870s provide exceptions.

East Cambridge got its first mansard-roof houses soon after the style was accepted in Boston, in about 1857. In 1860, S. S. Hazard began building what was described in the *Chronicle* as "a valuable brick block of . . . houses with French roof" at 83–95 Third Street, across from the courthouse (Fig. 240). Containing a high brownstone basement, two main floors, and a mansard roof, this row of seven dwellings, which became known as Quality Row, is much closer to contemporary work in the South End of Boston than to that in the Back Bay. The point is important because the South End work belongs to the vernacular, with old-fashioned Italianate overtones, while the Back Bay

240. 83–95 Third Street, 1860. Photograph 1964

241. Doorway with rope moulding, 89 Third Street



242. Mansard houses in East Cambridge

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buildings illustrate the new Academic French manner, which was being imitated by architects in Boston. East Cambridge, as before, followed the conservative rather than the progressive current of building. In the Third Street block, only the mansard roof is symptomatic of the new manner, and it may have been selected for purely practical reasons. The arched entries with rope mouldings and the curious curvilinear brownstone lintels on the facades, while unusual for East Cambridge, look back to the early 1850s in Boston (Fig. 241). Unfortunately, this row has had serious structural problems, caused by the omission of headers in the face brick and the deterioration of the brownstone. In 1986 the face brick was replaced, and cast stone replicas were substituted for the brownstone elements.

The mansard roof offered a number of practical advantages. Breaking the roof into two sections with two roof slopes and giving the bottom part a steep pitch allows additional headroom in the attic. The rooms in the top story are thus almost as large as those on the lower floors, and this full extra story of usable space can be obtained without the expense of carrying the outside walls through an additional story. The gain in space was particularly advantageous in East Cambridge, because desirable building lots on the hill were rapidly disappearing from the market. Of the approximately seventy-five Mansard houses built in the area, only about a dozen were single family residences (Fig. 242).

As the population in East Cambridge increased from 6,319 in 1855 to 10,033 in 1875 and the number of families from 1,247 to 2,135, two or three families were often crowded into space originally built for one. With the addition of a mansard roof, old single houses were often converted into flats. An instructive example is 457–459 Cambridge Street, a large double house (1848–49) that was changed into stores on the first floor and apartments above in 1871. By adding a mansard roof to the front part of the house, the owners created a full fourth story, while the slope of the original roof continued on the rear and north sides. A mansard roof was also added to the Greek Revival house at 112–114 Thorndike Street.

Other than the mansard roof, the characteristics of this style are somewhat hard to specify at the level of vernacular architecture by the time they have been combined with features from other styles. These buildings have a pronounced feeling of verticality, which results from the tall roofs as well as the high-ceilinged rooms. A building like 390–392 Cambridge Street (1869) further emphasizes this vertical element by the way the tall, narrow entrance pavilion pushes out in front of the main building and is capped by a mansard roof of its own (Fig. 243).

This house is clearly the most elaborate Mansard in the area and is somewhat closer to the academic norm than most: the pediments over the windows and the fluted brackets that support them, the greatly elongated windows of the main story, the dentil course of the cornice, the elaborate dormers, the segmental arches of the entrance porch, and the exaggerated keystones are all related to the academic tradition (Fig. 244). More fanciful is the lambrequin edging along the top of the mansard roof, which looks more like a curtain than a structural member. The brackets of the cornice, however, would be equally at home on a late Italianate facade. Built for William L. Lockhart, East Cambridge's

243. 390–392 Cambridge Street, 1869. Photograph 1964

244. Detail, 390–392 Cambridge Street. Photograph 1964

245. 60 Otis Street, 1871. Photograph 1970

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246. 462 Cambridge Street, 1866. Photograph 1964

most prominent coffin manufacturer and a successful real estate dealer, the house served as his residence until 1878 and remained in his ownership until 1898. It was rehabilitated and painted in appropriate period colors in 1985–86.

The tall, single house at 60 Otis Street (1871) continues the elegance of the Third Street row but without the floridity of 390–392 Cambridge Street (Fig. 245). Set slightly back from the street, the house attempts to follow through in the style implied by the roof. The elaborate door enframement is especially noteworthy: the elliptical arch complete with keystone directly above the door and the strongly projecting door hood, also with an elliptical arch, create an unusual degree of plasticity. This impression is furthered by strong window lintels, a bay window that extends through the bracketed cornice, and the arched, hooded dormer. Although the house has been re-sided, it retains its style and sophistication.

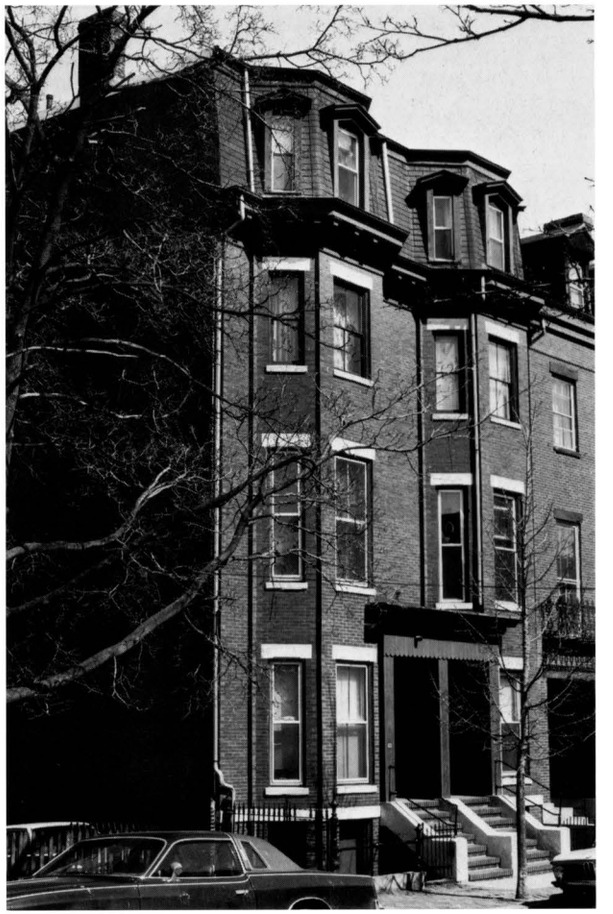
Another, simpler example is 462 Cambridge Street (Fig. 246), built in 1866 by a local carpenter, Amasa Studley. The deeply projecting door hood supported by sawn and lathe-turned brackets, the arched dormers, and the dramatic curve of the mansard roof provide the major stylistic features of this otherwise straightforward side-hall dwelling.

More common in East Cambridge in this period were double houses and rows of attached houses built in the Mansard style in both brick and wood. Typical is the wooden double house at 122–124 Otis Street (1870–71), with its paired entrances and heavy brackets and window mouldings, built by James Dennison, a prolific East Cambridge carpenter, and the double house at 95–97 Otis Street, with its two-story bays and bracketed window hoods. The double house at 11–13 Sciarappa Street has paired bay windows that dominate the facade by rising the full height of the building, including the mansard roof.

Double houses sometimes rose three full stories below a mansard roof to take full advantage of the narrow building lots in East Cambridge. Daniel Sortwell, the owner of a prosperous distillery on Cambridge Street and president of the Cambridge National Bank in East Cambridge, built the brick double house at 63–65 Otis Street in 1871–72 to rent out (Fig. 247) while he lived next door at 59 Otis Street in an elegant Greek Revival row.

The mansard roof enjoyed a long period of popularity in East Cambridge. The last use of this style was a row of three wooden houses at 93–97 Thorndike Street constructed in 1885, a full twenty-five years after the first appearance of the mansard roof in the area (Fig. 248). In spite of the roof form, the greater plasticity of this row, with its facade alternating between closely spaced bay windows and deeply recessed entrances, gives a suggestion of the freer and more flamboyant Queen Anne style, which was in full swing in most areas by the 1880s.

East Cambridge's Mansard houses of the 1860s generally followed the basic floor plan of earlier Greek Revival dwellings, and the interiors are not unlike those found in Bracketed houses. The woodwork was originally dark, although much of it has since been painted a light color. The high-ceilinged rooms have heavy plaster cornices, chimney breasts that project some 18 inches into the room, and round-headed fireplaces. Because they generally came after Bracketed work, stair designs in Mansard houses reflect the changes that began to affect the economy after the Civil War. As the price of labor climbed, builders found ways to simplify the construction process. Stairs ran in straight flights, and the handrail ran between newel posts at each end; however, this new arrangement was less graceful than the continuously flowing rail and curving steps of Late Georgian and Greek Revival houses.



247. 63–65 Otis Street, 1871–72

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248. 93–97 Thorndike Street, 1885

249. Newel post, 392 Cambridge Street, 1869. Photograph 1964

Concurrently, the bottom newel post took on a larger, more monumental form (Fig. 249). Square or polygonal rather than turned from a single piece of timber, its intricate shape was compiled from a number of parts and mouldings.

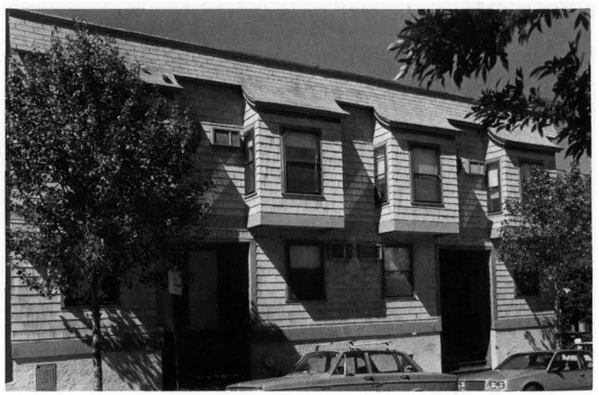
Queen Anne, 1875–95

The Queen Anne movement scarcely touched East Cambridge. After the 1870s, most residential building in the area consisted of multifamily dwellings. Tall, three-story apartment houses or three-deckers and crowded tenements were sandwiched between or behind existing houses in the old, built-up sections or were added to the already crowded, low-lying areas west of Seventh and south of Hurley streets. Much of this late building is architecturally nondescript and lacks the flamboyancy of some Queen Anne tenements in Cambridgeport. These offered low rents and builders could not afford to be very ambitious architecturally. The only structures in East Cambridge meriting the larger investments to give them a characteristic Queen Anne ornateness were public and commercial buildings, such as the Putnam School (1887) and 305 Cambridge Street (1877) (see Figs. 303 and 331).

Unlike earlier 19th-century styles, the Queen Anne movement was diverse and individualistic. The intellectual aims of this style were fine craftsmanship, an honest use of materials, untrammeled interior space, and freedom from academic rule or archaeological precedent. But at an everyday level, craftsmanship often meant machine-made decoration and creative freedom a profusion of picturesque features drawn from many sources.

In East Cambridge, some indications of the Queen Anne influence are a variety of exterior wood surfaces (clapboards, tongue-and-groove paneling, shingles cut in decorative patterns), a wide range of late bracket forms, and wood surfaces decorated by gouging, chiseling, turning, or chamfering. When the possibilities of wood were exceeded, the designer had recourse to molded synthetic materials for such details as the curious medallion busts above the entrances of the modest frame row houses at 53–59 Sciarappa Street (1882), now unfortunately completely re-sided (Figs. 250–251). Because of the emphasis on surface richness and applied ornamentation, Queen Anne buildings, more than others, suffer from the addition of artificial siding.

250. 53–59 Sciarappa Street, 1882. Photograph 1964



251. 53–59 Sciarappa Street

Another new material used by the Queen Anne builder was the stamped metal cornice, which added ornamentation without added cost. Pressed in metal dies and durable if kept painted, galvanized iron cornices often show 19th-century American design at its most exuberant. However, few exist in East Cambridge today. Some are additions to earlier buildings,

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252. 140 Otis Street, 1895, John E. Muldoon. Photograph 1964

such as the 1903 cornice added to 57–59 Otis Street (1851); others date from the turn of the century, such as the modest example at 526 Cambridge Street. The deep wooden cornice added in the 1880s to 536 Cambridge Street is more elaborate than any other, wood or metal, that remains along the street.

Queen Anne interiors have even darker varnished surfaces than the natural woods of Mansard houses. Rooms are still excessively high, and a wooden picture rail some 12 inches below the ceiling frequently takes the place of the older, elaborate plaster cornice. Doors often have transoms, and the woodwork of stock design varies little. The face of the trim is cut with complex profiles and the lintel blocks with a series of concentric rings. Superficially, it resembles Greek Revival trim but is much more mechanical. Queen Anne overmantels combine mirrors and small shelves, but often fireplaces are entirely eliminated.

Large Queen Anne houses have wide stairways with several changes of direction. In East Cambridge tenements, however, the stairs generally have a single run; newel posts are turned from 6-by-6 timbers and terminate in some kind of globe. In some triple-deckers and in buildings with stores on the ground floor, the stairs are narrow and enclosed by walls. Wainscoting of vertical tongue-and-groove boards is usual in the hallways.

The last private mansion to be built in East Cambridge falls at the end of this period. Erected in 1895 for Catherine Coveney, the wife of John W. Coveney, a prominent East Cambridge undertaker and politician, 140 Otis Street is exactly what one would expect for the period — Queen Anne moving toward Colonial Revival (Fig. 252). Still Queen Anne are the roof, central dormer window, and the paired bay windows; inside, the stair rises in three picturesque runs, and two corner fireplaces exemplify a simple Queen Anne taste. But the detail of the house inside and out is Late Georgian and relatively "correct." As in all Colonial Revival buildings of the time, much use is made of machine-made molded decorations for window trim, capitals, and mantelpieces. Much of this was removed in 1988, when the house was covered with vinyl siding.

To design the house, the Coveneys hired John Muldoon, the chief designer at the Irving & Casson furni-

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253. 170–174 Thorndike Street at Eighth, c. 1905. Photograph 1944

ture company, who had begun an architectural practice in 1890 and subsequently produced a number of Colonial Revival houses in Cambridge. Except for two factory buildings for Irving & Casson, Muldoon's only other known works in East Cambridge are a Colonial Revival double house, 41–43 Fifth Street (1890), and the fire stations at Third and Otis (1892, demolished) and Third and Gore streets (1895) (see Figs. 311–312).

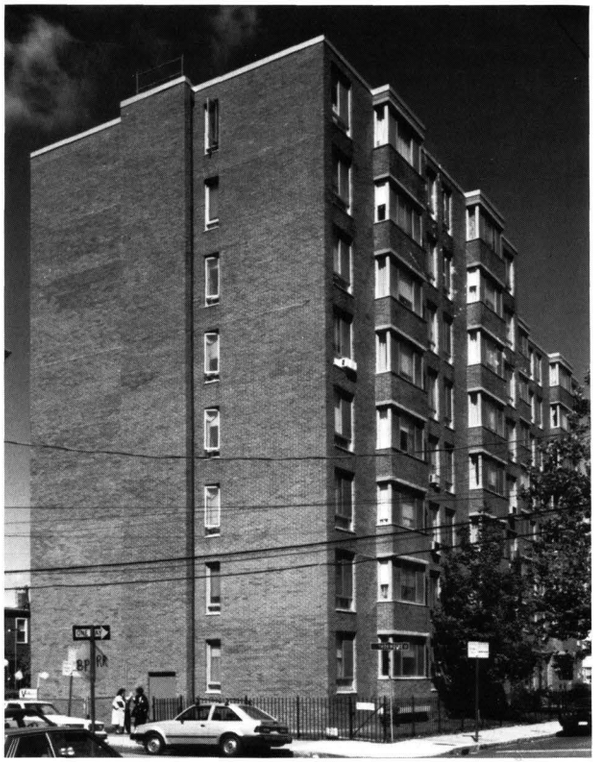
By the 1890s, however, the days of large single-family houses in East Cambridge were over. The most desirable land was already taken; space for the Coveney house had been obtained by demolishing two older houses. The remaining vacant land was in the low-lying, less desirable residential areas, which generally attracted builders of multifamily, less expensive housing (Fig. 253). In August 1890 alone, the *Cambridge Tribune* reported, seven three-story wooden tenement blocks were under construction, mostly on filled land near Sixth, Bent, and Vine streets.

With apartment buildings pushing up land values and the area becoming more and more a workers' district, it was natural that East Cambridge men of wealth built their homes elsewhere. Louis Vaupel, the former chief engraver at the New England Glass Company, commented on both phenomena. In 1894, he wrote that in spite of the financial panic, many apartments were built in the area, as people who had saved some money time, many of "the better classes moved away." For instance, William Goepper, whose family had been barrel manufacturers in East Cambridge and who had lived on Otis and Thorndike streets for years, chose to build an elegant new Colonial Revival house on Dana Hill (340 Harvard Street; 1897).

Housing construction in East Cambridge virtually ceased after 1900, when all the available sites had been developed. No significant activity occurred until the Cambridge Housing Authority began the Harry S. Truman elderly apartments on Eighth Street in 1968 (Fig. 254). Designed by Paul G. Feloney, the eight-story Truman apartments integrates well with its surroundings because of the use of brick and because the narrow streets do not allow the height of the building to become oppressive. The twenty-story Miller's River apartments (1972), another housing authority project, stands alone on a cleared site and dominates its surroundings. Only the adjoining Mary A. Castriotta neighborhood health center at 663–669 Cambridge Street (1974) relates well to its surroundings.

In the mid-1980s, the market-rate housing boom that other neighborhoods had been experiencing since the late 1960s finally reached East Cambridge. Townhouses began to proliferate on the fringes of the neighborhood, on sites that had been abandoned by industry. A double row of townhouses has replaced a former barrel factory at 130 Gore Street in a configuration eerily similar to that of such 19th-century tenements as Squire's Court (see Fig. 452). The new townhouses and condominiums on Fulkerson Street are the most astonishing construction in East Cambridge in many years (Fig. 255). Designed by the FAR Group, in part around some former factory buildings, their Postmodern false fronts and pastel colors are already dated and strike an incongruous note in the neighborhood.

Another project of note is the Pavilion (1986), a mid-rise condominium development between Gore and Cambridge streets designed by the Washington firm of Perkins & Will. The site had lain vacant for many years, and a great opportunity was offered to reintegrate the fabric of the neighborhood. However, the pale brick, inappropriate setbacks, and awkward massing are entirely out of character with East Cambridge building



254. Truman Apartments, 27 Eighth Street, 1968, Paul G. Feloney

255. Thorndike Place, 217 Thorndike Street, 1986, FAR Group

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256. Bulfinch Square, 52 Otis Street, 1813–1924. Historic rehabilitation by Graham Gund Associates, 1981–86

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III

Nonresidential Architecture

East Cambridge is unusual for its rich concentration of civic buildings. Early in its history, Andrew Craigie and the Lechmere Point Corporation were successful in having the seat of Middlesex County, the largest and most prosperous in the commonwealth, moved to Lechmere's Point. County buildings have dominated the neighborhood ever since, and by the end of the 19th century they filled three entire blocks. No lots were set aside for municipal buildings, so schools and firehouses were sited later as circumstances dictated. Most of them are relatively modest, as are the commercial buildings along Cambridge Street. Because of its diverse population, East Cambridge did acquire many significant churches, ranging from a simple, 1826 Federal brick meetinghouse to a monumental 1874 stone Catholic church that represents the striving of the Irish Catholic community in East Cambridge.

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Middlesex County Buildings

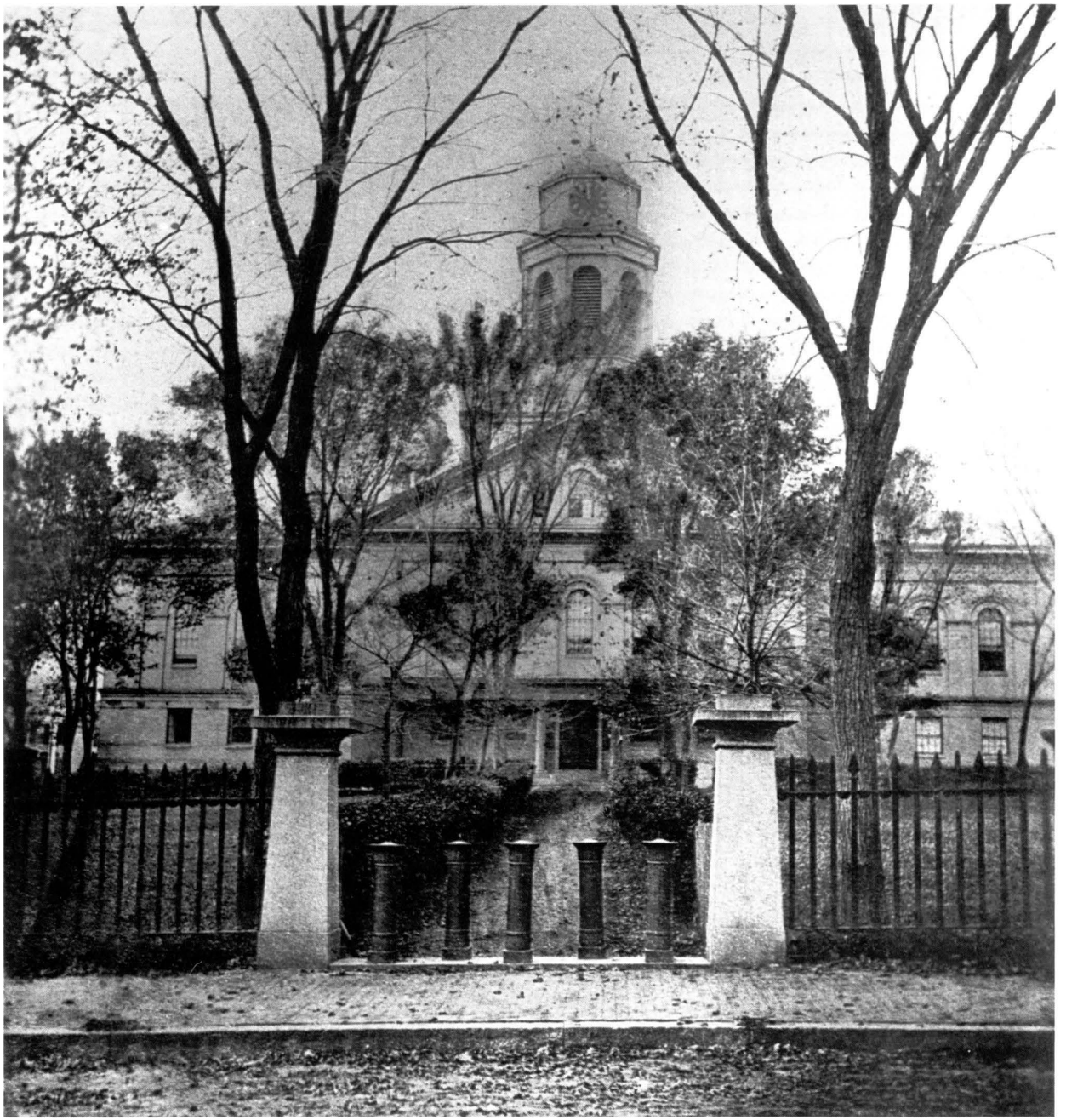
Courthouses and Registries of Deeds

The new buildings for the use of the County of Middlesex, at Lechmere Point, are situated on a gently rising ground, facing [the] Charles River, and in full view of Boston, Charlestown, and the surrounding country; when completed, with the proper inclosures, they will add another feature of beauty to the rich and variegated view of this vicinity.

Columbian Centinel, November 2, 1816

The most significant building in East Cambridge is the old Middlesex County Superior Courthouse (Fig. 257). Designed by Charles Bulfinch in 1813 and enlarged by Ammi B. Young in 1848, it has undergone many dramatic changes. As it provided a focus for development of the area when it opened in 1816, so its restoration has provided a focus for redevelopment in the 1980s.

The history of the courthouse and the other county buildings is complex and covers a long period in East Cambridge's development. On September 21, 1813, the Middlesex County Court of Sessions voted to accept the Lechmere Point Corporation's offer of land and money to build a new courthouse and jail in East Cambridge, far from its old location in Harvard Square. The county appointed a committee to oversee the construction of the new buildings, and, in November 1813, the corporation conveyed to the county the block bounded by Otis, Thorndike, Second, and Third streets as the site for a brick courthouse, and the western part



257. Superior Courthouse, 1813, Charles Bulfinch. Rebuilt by Ammi B. Young, 1848. Photograph 1848–77

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of the block between Otis, Spring, Second, and Third streets as the site for a stone jail. The corporation agreed to underwrite these structures to a maximum of $24,000; any further costs were to be borne by the county.

The agreement indicates that the proprietors of the corporation had already commissioned Charles Bulfinch to draw plans for the courthouse and jail and had these plans in their possession when they made the agreement with the county. Their choice of Bulfinch was almost inevitable, considering his prestige, his unparalleled experience with public buildings, and his commissions for houses on Beacon Hill for the Mount Vernon Proprietors, including three for Harrison Gray Otis, one of the first supporters of the Lechmere Point development. Bulfinch charged $100 for designing both the courthouse and jail, but county records suggest that he was never paid. The plans have not survived, but bills submitted to the county during the construction and evidence found during the restoration helped determine the building's original appearance.

The courthouse was sited above an open slope that ran down to the edge of the salt marshes along the Charles River. It was thus highly visible from Boston and served as a shining advertisement for Craigie's new community. The jail, on the adjacent block, was much less visible, as the eastern end of the block was first developed by others.

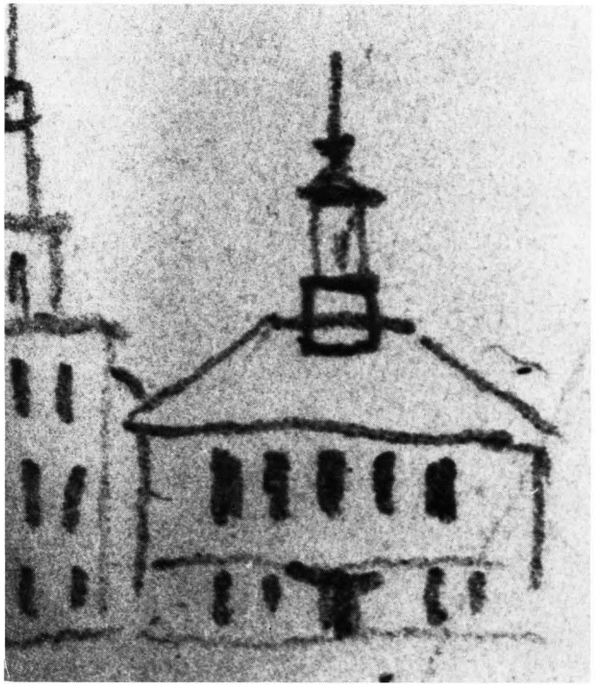
The courthouse and jail were put up between 1814 and 1816. Bills submitted to the county show that the cellars for both were dug in July 1814. In September and October, the floors and roof of the courthouse were framed, and a supper was held on November 1 to mark the raising of the roof. Hammered granite for both buildings was purchased from the State Prison in Charlestown, where the prisoners dressed stone that was quarried in Chelmsford and transported on the Middlesex Canal. Bricks for the courthouse were purchased from several firms in Charlestown.

Mahogany stair parts were turned in August 1815. In July and November 1815, a copper weathervane and ball and a Revere bell were purchased and installed. The courthouse and jail were sufficiently complete by January 15, 1816, for the county to auction most of the tools and wagons that had been used in the construction.

The last bills were submitted at the March 1816 term of the Court of Sessions, which reported that the fireproof offices for the clerk of the Judicial Court, the register of probate, and the register of deeds were ready for occupancy. In November 1816, the Superior Court met for the first time in its new home, and the Lechmere Point Corporation gave a public dinner at the Lechmere Point Hotel to commemorate the occasion. The *Columbian Centinel* of November 2, 1816, provides the only known description of the early courthouse:

The Courthouse is of brick, remarkably simple, but varied in the form of the windows and arches, and produces a pleasing effect from the harmony of its proportions. It contains a large Court room, grand and petit jury rooms, on the second floor, while the lower story is divided by brick partitions and with floors and ceilings of brick, into offices for the Judge of Probate, the Register of Deeds, and the records of the Court of Common Pleas. The records will be kept in an apartment made proof against fire, agreeably to the late law of the Commonwealth, and for its ease of construction, security and ventilation, may be recommended as a model for such purposes.

No renderings of the courthouse at the time of its completion have been found. The absence of drawings and plans has confused many historians, who have failed to recognize the surviving features of Bulfinch's design and held the mistaken belief that the building was demolished in the 1848 remodeling. The only known depiction of the courthouse before 1848 is an 1838 sketch of the Second Street facade by John Warner Barber (Fig. 258). This is literally a thumbnail sketch, which Barber used in preparing his woodcut of East Cambridge seen from the Charlestown Bridge (see cover and Fig. 427). It shows the courthouse as a two-story building with five bays, a center entrance, and a steeply pitched hip roof surmounted by a tall cupola. The first and second stories were divided by a belt course; the second story, containing the courtrooms, was considerably taller than the ground floor. Barber indicated



258. Sketch of the Superior Courthouse, 1838

some kind of trim or entablature over the entrance but showed no detail. The original entrance trim was lost in the remodeling of 1848. Bills indicate that eight columns were turned for the courthouse; these may have been used on one-story porticos at the entrances facing Second and Third streets, similar to the porticos on Bulfinch's Worcester County courthouse (1801).

During the restoration of the courthouse in 1983–86, new evidence emerged about Bulfinch's design (Fig. 259). When the interior plaster was removed, brick infill defined the original window openings and revealed the overall configuration of the 1814 building. As a result, we now know that the facades facing Second and Third streets each had five arched windows within recessed arched panels on the second floor, similar in size and location to the current openings. The facades facing Otis and Thorndike streets were divided into three bays, with second-floor rectangular windows within recessed panels and small semicircular windows

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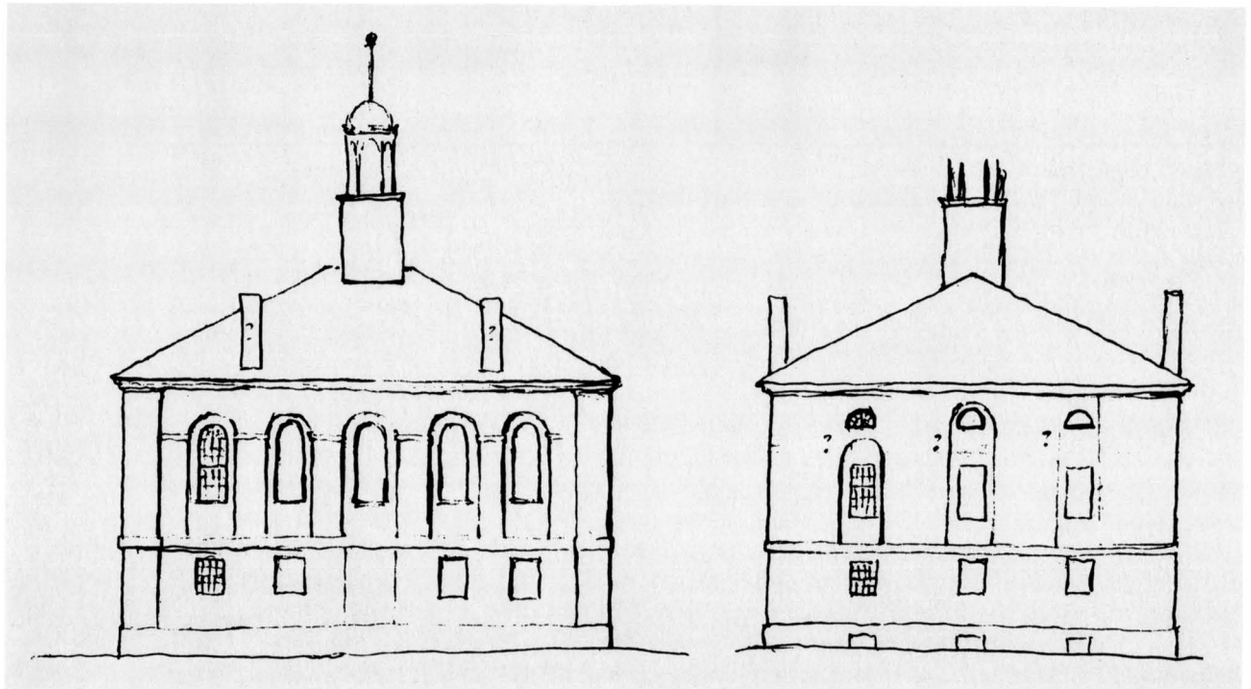

259. Conjectural elevations of the Superior Courthouse, 1813, Charles Bulfinch

above. These may have illuminated galleries on either side of the single large courtroom that spanned the east end of the building.

Remnants of the 9-inch-wide granite belt course between the two floors were discovered during the restoration and were found to have been painted buff. The same color also appeared on some original exterior bricks, suggesting that the entire courthouse was painted, possibly to resemble Bulfinch's stone jail nearby. Brick arches in the cellar revealed that the original cupola was considerably smaller than the massive 29-foot base of the present cupola, which was added in 1848 and rebuilt in 1938.

Alterations and additions were first made in the 1830s. In 1835–36, a fireproof building for the Probate Office was erected adjoining the west side of the courthouse. Court records list brick and stone supplied by the Massachusetts State Prison as the building materials but give no dimensions, and no view of this addition is known. Two wings were added to the courthouse in 1839, but all that is known about them is that the builder was Timothy Fletcher and the architect was Richard Bond (1793–1861), who also designed St. John's Church (1842).

The 1840s brought both major and minor changes. Iron shutters were put on the lower courthouse windows in 1844, and an iron fence was placed around it in 1846. In 1846–47, the county commissioners had plans drawn for enlarging the courthouse, but they were not adopted (nor have they survived). In the fall of 1847, the commissioners tried again, asking Ammi B. Young, the architect of the Custom House in Boston and later supervising architect of the U.S. Treasury, to formulate plans for enlarging the courthouse in a way that would allow the old section to be used during construction. Young's plans for adding new wings and refurbishing the existing building were accepted in 1848. None of the plans have survived, but the county's published specifications, an 1849 architectural description, a lithograph of the remodeled courthouse (Fig. 260), one photograph, and the construction bills give a fairly complete picture of this extensive project. In 1983–86, Graham Gund Associates used these documents and surviving physical evidence to restore the courthouse to its appearance in 1892–93, when new face brick replaced the stucco applied by Young in 1848.

On March 7, 1848, the construction contract for Young's project was awarded to Albert Blaisdell and Gridley J. F. Bryant (1816–99), later a prominent Boston architect whose firm designed or remodeled numerous houses and public buildings, including thirty-six courthouses. The 1839 wings were demolished and as much brick and granite as possible were salvaged for reuse. New two-story wings, 46 by 72 feet, were attached to the north and south sides of Bulfinch's building, which thus became the core of the new courthouse. The east facade of the original building was 68 feet long and projected 14 feet in front of the new wings. A pediment with three arched windows was added to this facade in place of the original hip roof. The new entrance was framed by heavy granite piers and a carved lintel reading: "BUILT 1814. ENLARGED 1848."

A cast-iron portico on the east facade had Corinthian columns modeled on Athens' Temple of the Winds, which had been illustrated in Nicholson's *Architectural Dictionary* (1819) as well as in Stuart and Revett's *Antiquities of Athens* (1762–1816), both standard references in the early 19th century. The portico was destroyed in 1901, and the architect's specifications, a photograph taken before 1877 (see Fig. 257), and a drawing published in 1889 (see Fig. 272) were the only documentation of its appearance. Based on this information and evidence uncovered during the removal of the 1901 colonnade in 1983, the commission's historian Robert Nylander was able to develop the design that was used in the recreation of the portico in 1985 (Fig. 261).

Young was quite sensitive to Bulfinch's design. He maintained the original five bays and center entrance

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260. Superior Courthouse, as remodeled by Ammi B. Young

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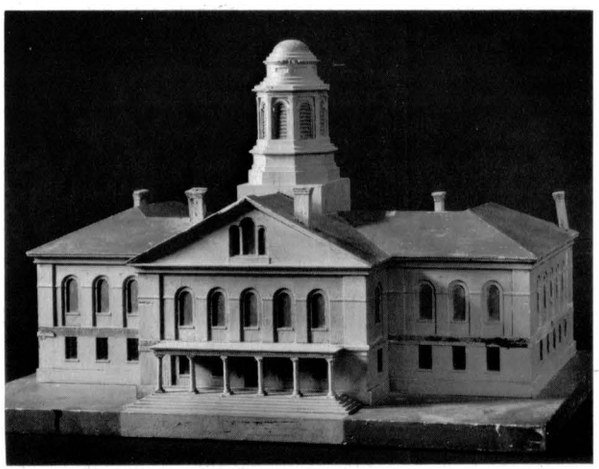
261. Portico, Superior Courthouse, as restored



262. East facade, architectural model, probably 1848

263. East facade, Superior Courthouse. Photograph 1985

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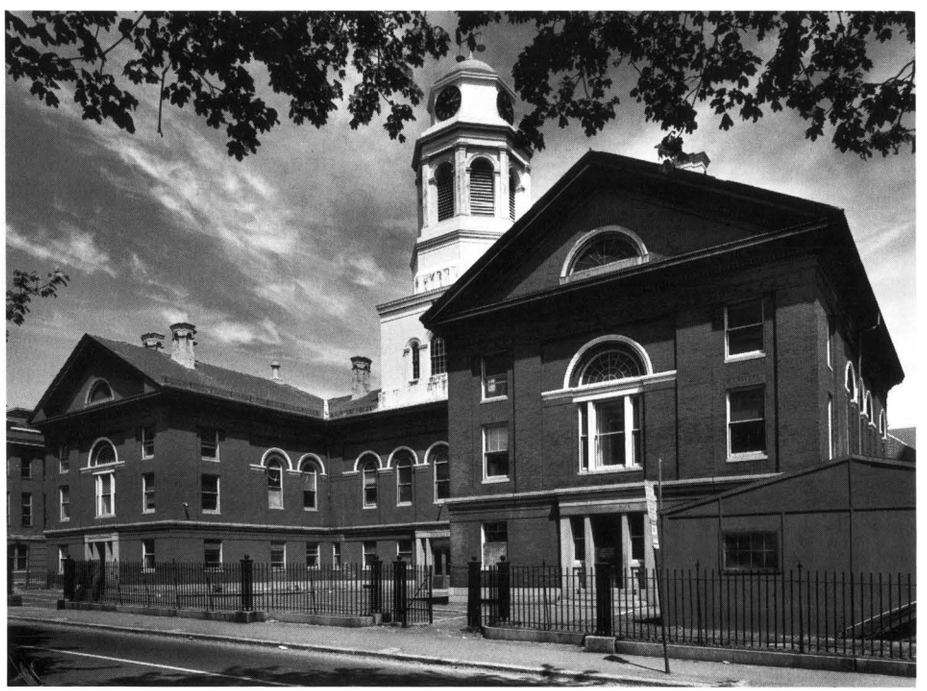
of the central block and kept the roundheaded windows, set in recessed arches, on the second floor, repeating them on the new wings. These new windows replaced the original semicircular windows on the north and south facades. The floors were again separated by a heavy granite belt course, but Young's was considerably more elaborate than the original. The roof was completely changed, from Bulfinch's high hip to a series of intersecting gables and pediments. A tall, domed cupola still capped the building, but the new one was considerably bulkier and now contained a clock.

An architectural model owned by the county shows a similar but somewhat more harmonious design than what was actually built (Figs. 262–265). Believed to represent Young's original proposal to the county commissioners, it shows more graceful proportions on the east elevation and seems to preserve more of Bulfinch's east facade below the cornice, except for the addition of a portico. Instead of the florid, vaguely Romanesque arches over the window recesses that were finally built, the model shows a much different treatment of the west (Third Street) facades of the new wings and a more skillfully proportioned tower with no clock. The three-bay west facades of the model echo the north and south facades of Bulfinch's building, but they are more complexly articulated, with an emphasis on the vertical elements. The model also retained Bulfinch's hipped roof. The overall appearance of the courthouse suffered from the changes from the model, changes that may have been ordered by the county commissioners.

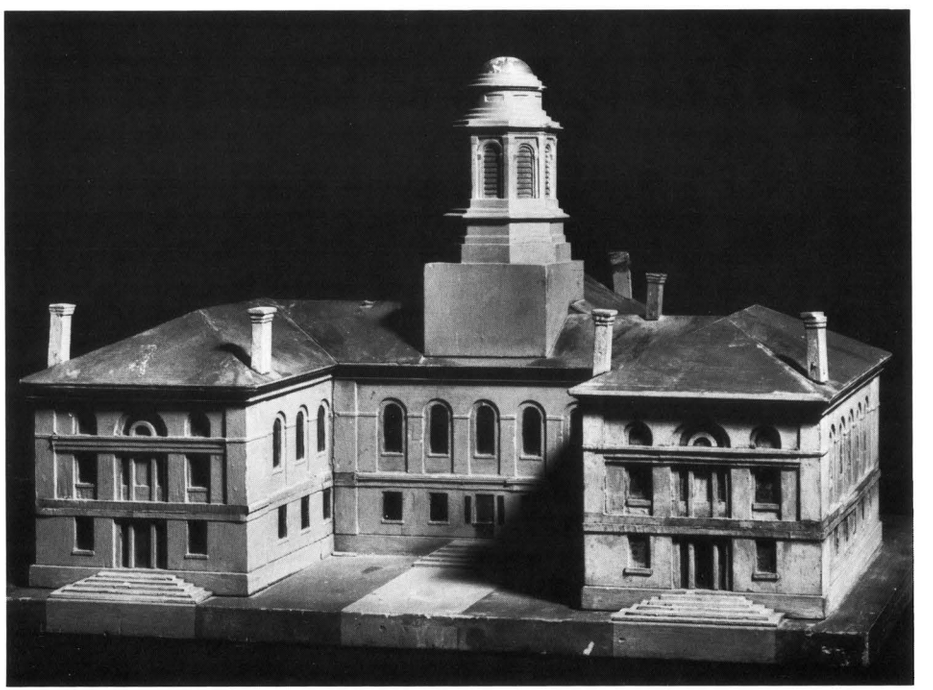
The exterior finish of the rebuilt courthouse and wings differed considerably from the original. To unify the old and new parts of the building, all the exterior walls were covered with a tinted mastic cement, and the plasterer was directed to "line it off and point it in imitation of stone ashlar work" (*Specifications*, p. 7). All of the window caps, cornices, and capitals were cast iron, sanded and painted in the color of the mastic; the only exception was the copper rake molding on the east pediment.

Considerable dry rot was found in the original building, which required more extensive work than had been anticipated. Once overhauled, this section was used for witness rooms and offices for the clerk of courts, county commissioners, and treasurer. The new wings held the offices of the registers of deeds and probate on the ground floor and, upstairs, spacious new courtrooms for the Superior Court and the Court of Common Pleas.

All of the ground-floor rooms of the wings were made fireproof, for the safekeeping of records. Groin-vaulted ceilings supported by four simple cast-iron columns in the center of each room and by flat capitals at the walls



264. West facade, Superior Courthouse. Photograph 1975



265. West facade, architectural model, probably 1848

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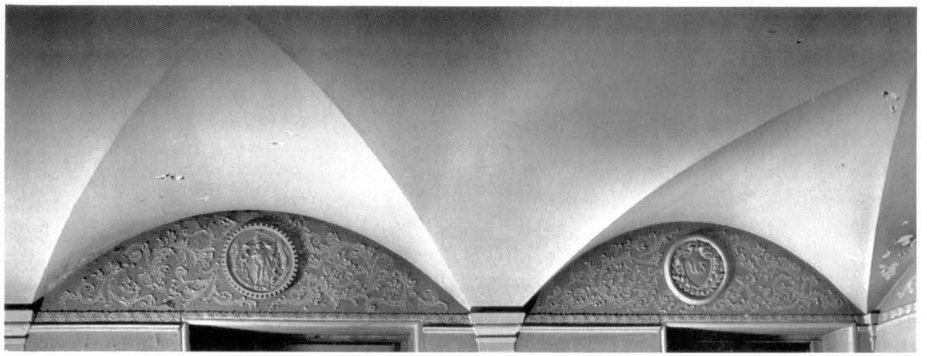

266. Plaster decoration, c. 1900, in the ground floor of the north wing of the Superior Courthouse, 1848. Photograph 1975

268. Seal of the Court of Common Pleas, 1975, John Garvey

269. Iron staircase in the north wing of the Superior Courthouse, 1848. Photograph 1975

267. Court of Common Pleas, second floor of the north wing, 1848, redecorated c. 1900. Photograph 1975

270. Main staircase, Superior Courthouse, 1848. Photograph 1975

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still remain; the only additions are floral decorations, seals, and textured plaster from about 1900 (Fig. 266).

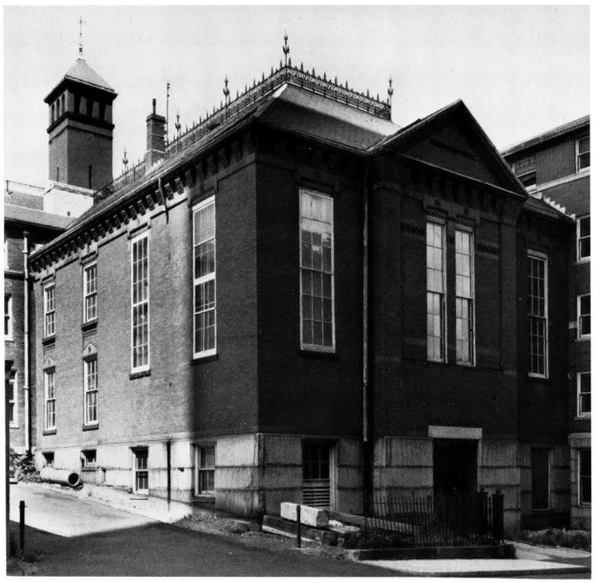
On the second floor, the courtrooms had identical paneled mahogany wainscoting, judges' benches, and jury enclosures as well as mahogany posts and railings dividing spectators from the participants (Fig. 267). All the furnishings were removed in the 1970s, when the building was threatened with demolition. The courtroom ceilings are coved with square coffers and a band of rosettes just above the cornice line. Above the judge's bench in the Common Pleas courtroom in the north wing is a large plaster seal of the court executed by John Garvey of New York, who was responsible for the ornamental plaster in Young's Boston Custom House (Fig. 268). A similar seal of the Superior Court has been removed from the courtroom in the south wing.

The second floor is reached by a double staircase opposite the front entrance and two iron circular staircases at the west ends of the wings (Fig. 269). The main staircase, on the west side of a long central hall, consists of two straight flights of stairs, each 5½ feet wide, which rise on either side of the Third Street entrance to the building, then meet at a landing and turn 180 degrees to face the entrance and continue as a single staircase 8 feet wide to the second story (Fig. 270). The width and unusual configuration of this staircase made it a major decorative element in the entrance hall and it remains so in the restoration. The walls of the entrances, corridors, and stairways throughout were "finished rough, colored in imitation of granite, lined off in blocks and jointed to resemble ashlarwork" (*Specifications*, p. 6) similar to the exterior.

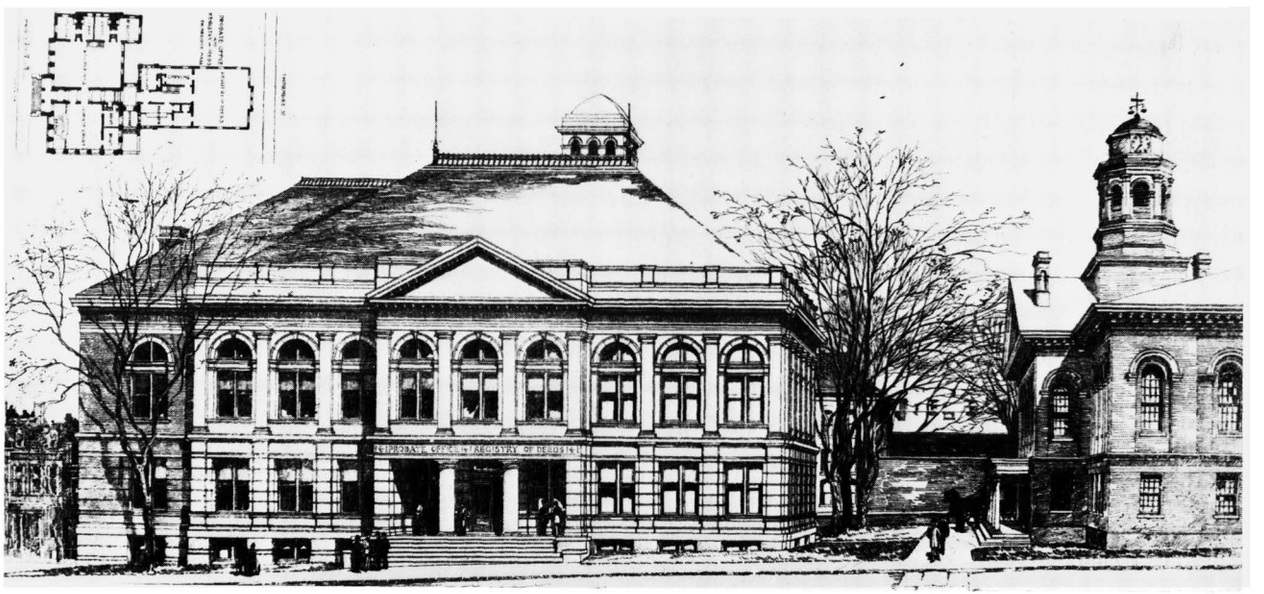
The best aspect of Young's courthouse originally was its porticoed facade facing the river. Unfortunately, the building was not to maintain its isolated, monumental position for very long; the county was growing quickly and soon required a building to house the Registry of Deeds. In 1877, a new registry was built on the Second Street half of the block, facing the courthouse and cutting off its view of the river. The placement, size, and materials of the registry were compatible with the courthouse, but the detailing shows its later date. Built on a heavy, rough-faced granite foundation, the registry has narrow vertical windows, brownstone trim with incised linear ornament, a corbeled brick cornice, and a steeply pitched hip roof capped by elaborate cast-iron cresting (Fig. 271). The two buildings worked fairly well together, as each was able to maintain a certain integrity and monumentality, but even this relationship did not last.

In 1889, the registry was moved south toward Thorndike Street, and a new building for the Probate and Insolvent courts was built in front of it, facing Otis Street. Designed by Robert P. Wait and Olin W. Cutter, the Probate Court has a pedimented central section three bays wide, roundheaded windows on the principal second story, and heavy brownstone trim (Fig. 272).

Inside, the magnificent Hall of Records rises 38 feet to an elaborately colored decorative ceiling dating from 1901. The walls are richly ornamented with plaster fleurs de lis and large medallions bearing the state and county seals; an ornate bronze and iron balcony runs around three sides of the room. A. H. Davenport & Company designed the original cabinetwork and furniture, but all was removed in 1975. Once sadly ne-



271. Registry of Deeds, 1877, architect unknown. Photograph 1975



272. Probate and Insolvent Court, 1889, Robert P. Wait and Olin W. Cutter, showing original relationship with Superior Courthouse. Rendering 1889

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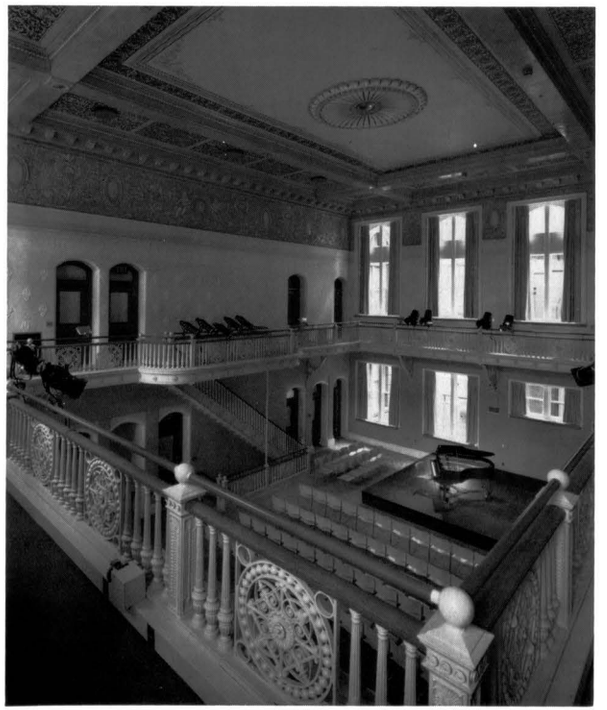
273. Stair and balcony, Hall of Records, 1889. Photograph 1975



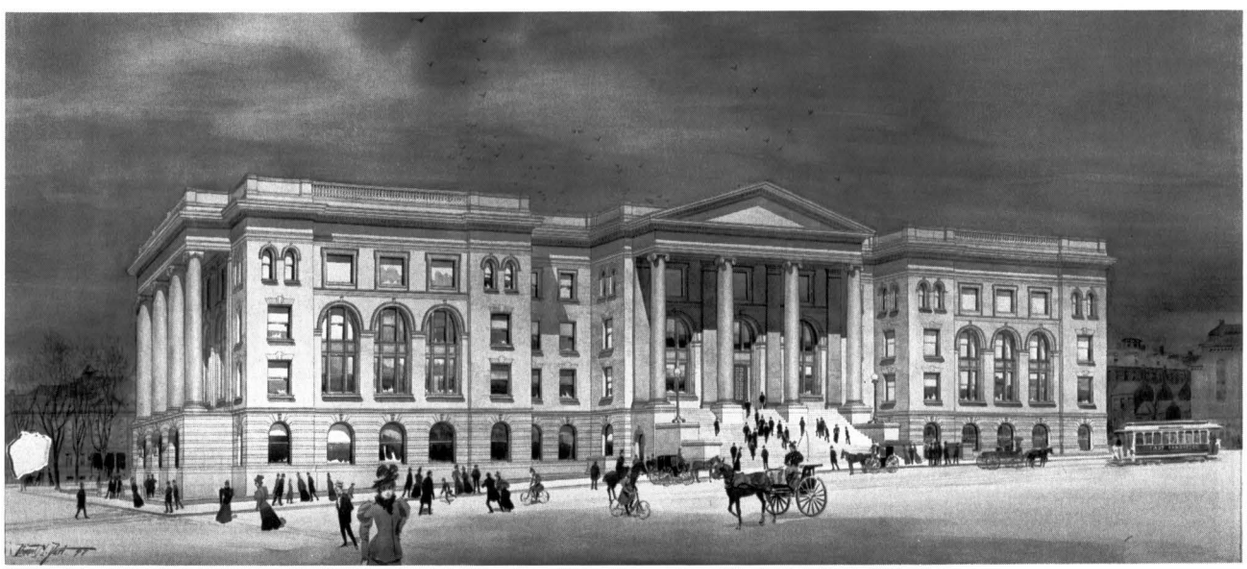
274. Hall of Records, as restored by Graham Gund Associates for the Cambridge Multicultural Arts Center, 1985

glected and in complete disrepair, this hall has been excellently restored for the Cambridge Multicultural Arts Center and is now one of the showpieces of the courthouse complex (Figs. 273–274).

Even these buildings and additions were not sufficient to satisfy the needs of the rapidly growing county. In 1896, construction began on a new Registry of Deeds and Probate building on the entire block bounded by Second, Third, Cambridge, and Otis streets. The project required the destruction of many early buildings (see Figs. 161–162, 443, and 445). The new building, designed by Olin Cutter, is almost too monumental for its site (Fig. 275). It dwarfs the earlier county buildings, and there was barely room to squeeze in the massive staircases leading up to the two pedimented porticos. These porticos, with their enormous red brick Ionic columns, are the central feature of the highly formal, symmetrical Cambridge and Otis Street facades (Fig. 276). Even the Second and Third Street facades have elevated, brick-columned porches, but they are purely ornamental. The building was intended to impress with its monumentality; efficiency and function were secondary.

The registry exemplifies the American Renaissance style popularized by Chicago's Columbian Exposition of 1893. Although similar buildings were built across the country in the years before the First World War, few were made of red brick; stone or yellow brick was the usual material. Red brick may have been used in deference to the older county buildings or because local brickyards could only produce that color. Certainly it gives the registry a warmth and richness shared by few others of its type, and the great columns built entirely of brick are memorable. After many years of deterioration, the columns had to be stripped and rebuilt in 1987, when the county undertook a restoration project that included new windows and an authentic repainting of the exterior trim.

In 1892 and 1893, Young's courthouse was faced with red pressed brick, changing its appearance radically. The mastic coating had been repaired several times and was no longer considered satisfactory. To



275. Registry of Deeds, 1896, Olin W. Cutter

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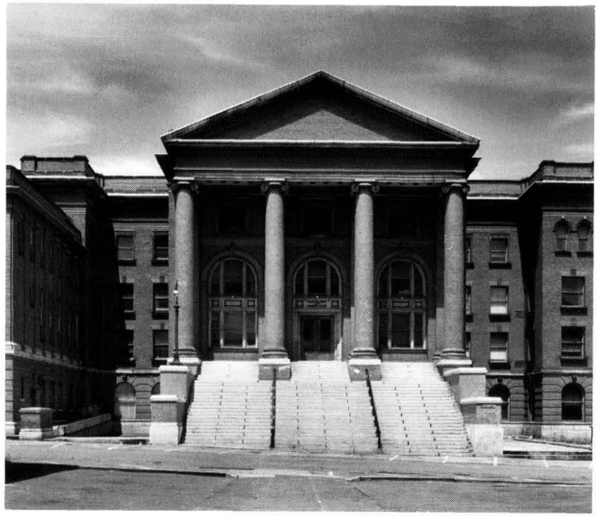
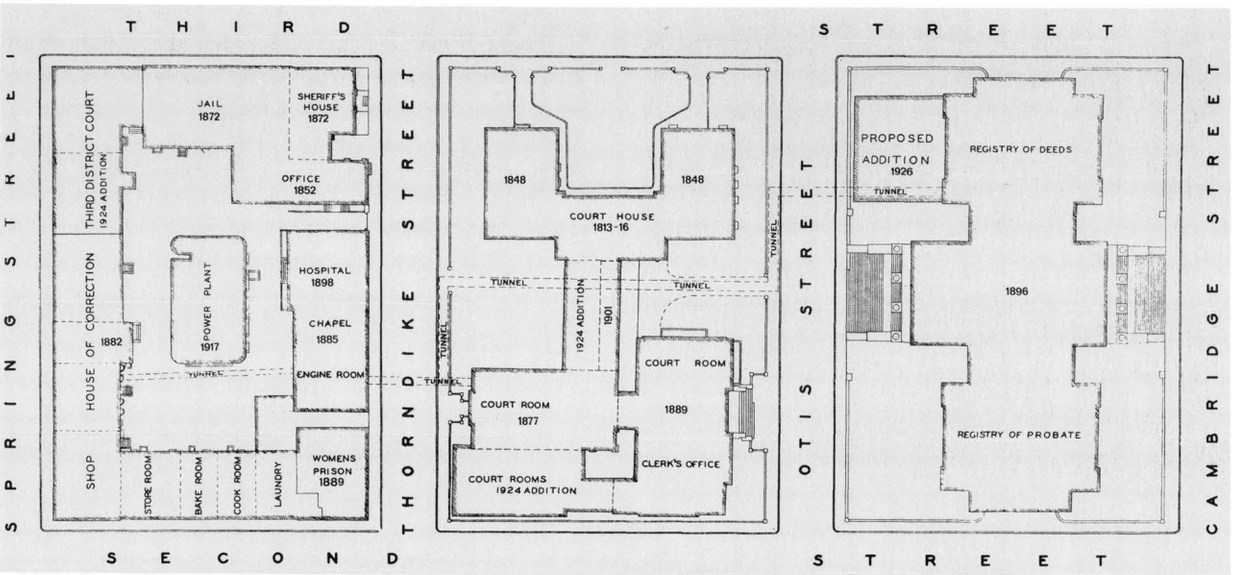
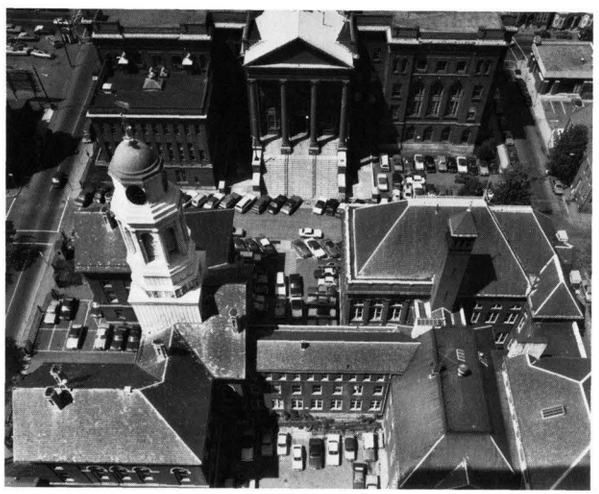


276. South portico, Registry of Deeds. Photograph 1975



278. Middlesex County buildings, 1926



277. Superior Courthouse (left) and Registry of Deeds (top). Photograph 1975

retain the proper relationship of wall surface to cornice, belt course, and windows, the face brick was completely removed along with the mastic before the new brick was applied. The cornice and trim were painted dark brown to imitate brownstone.

When the new registry and probate building was completed, the 1889 Probate and Insolvent Court was converted to a law library and office for the clerk of courts, whose title was carved in the lintel above the entrance, and the old registry was turned into a single courtroom. In 1900, the legislature appropriated $40,000 to build a passageway between the clerk's building and the old courthouse. Completed in 1901, this link, presumably designed by Olin Cutter, covered the entrance to Young's courthouse and required the demolition of the 1848 cast-iron portico. The new colonnade, with granite Doric columns and entablature, faced Otis Street. In about 1924, an additional range of offices was built along the Thorndike Street side of the link.

If the county had grown no more, East Cambridge would have had a fairly pleasant and comprehensible group of county buildings. Twentieth-century additions to the courthouse complex, made in the attempt to avoid further land acquisition, overcrowded the site, destroyed the integrity of the older buildings, and detracted from the character of the complex (Figs. 277–278). A 1924 building along Second Street obscured most of the 1877 structure and filled the last open corner of the original courthouse square. Even the 1896 registry had its axial symmetry destroyed in 1926 by a large addition at the corner of Otis and Third streets.

The only other county building of note is the Third District Court of Eastern Middlesex. Originally a municipal police court in Harvard Square, this court moved into a remodeled section of the jail at the northeast corner of Third and Spring streets in 1913. The court functioned there until 1931, when the present Georgian Revival building, by Charles Greco, was constructed

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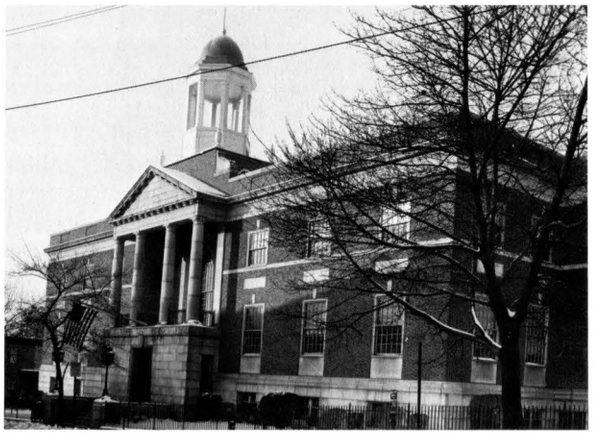

279. Third District Court, 1931, Charles Greco. Photograph c. 1965

on the west side of Third Street between Thorndike and Spring (Fig. 279). For this building, the county provided an adequate lot, but at the expense of some fine early row houses. After many years of disuse, this courthouse was renovated by the commonwealth in 1986.

The most recent county project is the New Superior Court Building (1968–74), by Edward J. Tedesco Associates. An infamous example of corruption and mismanagement, this building cost five times its estimated value of $14 million and was not completely occupied until 1982. Rising twenty-two stories, four more than originally planned, its scale and material are grossly incompatible with its surroundings. The project required demolition of the house of correction, which covered the block between Thorndike and Spring streets, and as originally designed threatened all the 19th-century county buildings between Thorndike and Cambridge streets (Fig. 280). Only the scandal accompanying the construction of the new courthouse saved the older buildings from certain destruction when the new building was completed in 1974.

Ten years went by, during which the Cambridge Historical Commission and other bodies worked to find an alternative to demolition. The vacant courthouse complex was listed on the National Register of Historic Places, and discussions began between the city's Community Development Department and the Cambridge Multicultural Arts Center (CMAC) that resulted in a competition for adaptive reuse of the site. In 1981, Graham Gund Associates began to restore the entire block, converting space in the 1889 Clerk of Courts building, with its splendid Hall of Records, for CMAC and restoring the Bulfinch-Young courthouse to its appearance in 1892-93. The 20th-century structure obscuring Young's east facade was removed, and the 1848 portico was accurately recreated. Inside, appropriate multicolor paint schemes and attention to detail have sensitively recreated a 19th-century feeling in the former courtrooms, now architectural offices. Once considered an almost impossible undertaking, the restoration and adaptive reuse of the courthouse complex, now known as Bulfinch Square, owes its success to the vision and sensitivity of Graham Gund Associates.

280. Proposed Middlesex County Superior Courthouse, 1968, Edward J. Tedesco Associates

The Jail and House of Correction

This is a wretched place, — almost as bad as the old State Prison, with its crowded nightrooms, and immense and unrestrained evil communication at night, from the very nature of the case, from the construction of the building, and the number of inmates, old and young, men and women, — perfectly known and felt to be, by the keeper, the sheriff, and the county commissioners, an intolerable nuisance, to be endured no longer than is necessary to erect a new building, without which it is impossible to remedy the evil. The county commissioners have procured a very perfect plan of a new building, and have resolved to build it with

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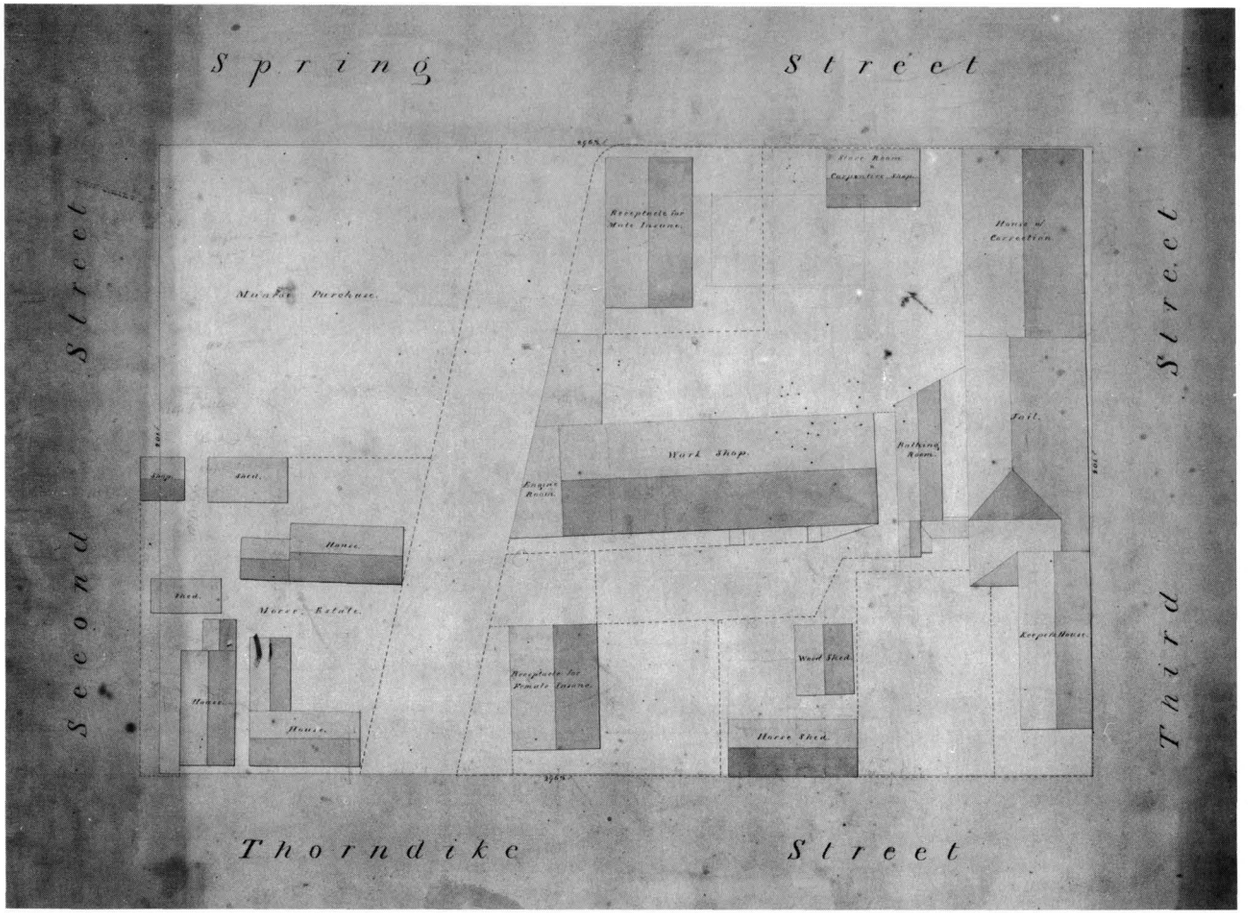

281. Plan of the Middlesex County jail complex, 1851

all possible dispatch. It is earnestly hoped, that the want of means will not delay the building operations till another season. It will be perfectly understood, that no blame is attached to the sheriff and keeper in the above remarks. The fault is in the buildings, which admit of no remedy.

Twelfth Annual Report of the Boston Prison Discipline Society (1837), p. 149

Problems like these were to plague Middlesex County for a century and a half. From the time of its completion in 1816, the jail (and later the house of correction) suffered from chronically low budgets, cramped quarters, and piecemeal expansion. The complex, now demolished, is best remembered for its social rather than architectural significance, for it was here that the reformer Dorothea Dix (1802–87) began her national crusade against inhumane prison conditions for the mentally ill.

In 1813, the Lechmere Point Corporation agreed to fund the construction of a courthouse and jail in East Cambridge. The tract donated for the jail was a 75-foot-wide strip along the western edge of the block bounded by Thorndike, Second, Spring, and Third streets. When the county was granted the original jail lot, the eastern half of the block was bisected by a narrow street, which ran on a slight diagonal from Spring Street to Thorndike Street. Through a series of purchases in 1836 and 1851, the county finally acquired the rest of the block (Fig. 281). Before 1800, much of the block had been under water; it was partially filled by taking down a bluff west of Third Street. According to an 1885 account, there had been a landing for boats near the arched gateway of the prison on Thorndike Street. British troops had landed nearby in 1775, and two English bayonets were excavated in the prison yard in the late 19th century.

The architectural development of the county jail and house of correction is very complicated. The construction of new buildings, demolition of old ones, and remodeling occurred throughout the 19th century, but always in a piecemeal fashion because of a chronic lack of funds. Building began on Third Street and gradually spread eastward along the block's periphery. By 1885,

282. Dorothea Lynde Dix

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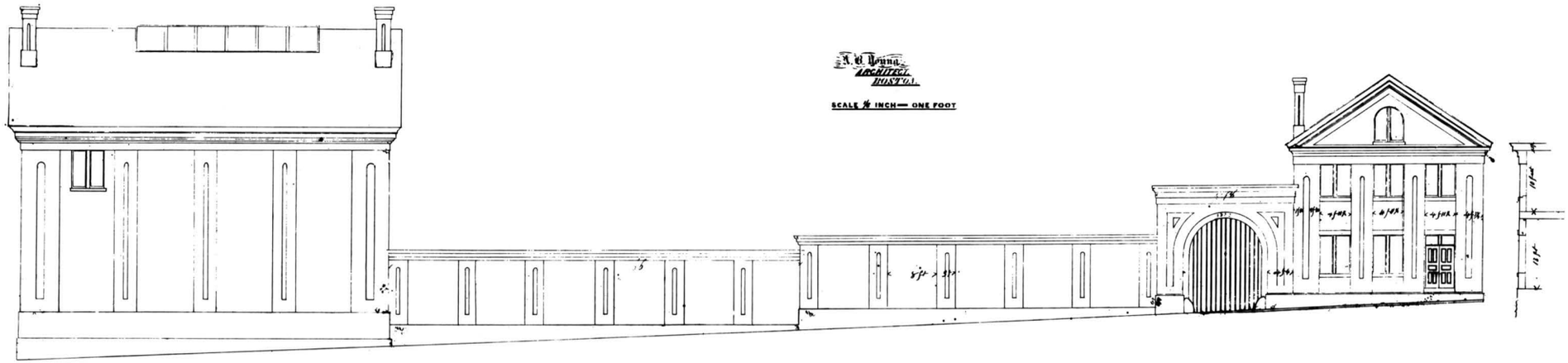

283. Sheriff's office and women's prison with gate and wall, Thorndike Street elevation, 1852, Ammi B. Young

jail buildings surrounded the block, enclosing an open courtyard (see Fig. 288).

Bulfinch designed the original Middlesex County Jail at the same time he designed the courthouse. It was described in the *Columbian Centinel* of November 2, 1816:

The Gaol is three stories in height, built wholly of stone in large blocks of Granite, well hammered and laid in regular courses; — every attention has been paid to render it secure in its construction, and the comfort of the prisoners has been consulted in making it airy and well ventilated, and has proper and safe means of warming the rooms and passages.

The jail sat on Third Street near the middle of the block and faced east, as did the courthouse. A simple, boxy, five-bay building, 45 by 95 feet, the jail was symmetrical in plan and elevation, with a central entrance, a massive cast-iron door, and a graduated pattern of grated windows. According to an 1834 description, each floor of the three-story jail contained four rooms, 11 by 16 by 7½ feet high, with an iron door and two grated and glazed windows. Two bunks with straw mattresses were the only furnishings. The windows were larger on the upper levels; on the third floor they measured 3 feet square. In 1834, the first and second floors were occupied by men awaiting trial, while the third floor was reserved for women and debtors. Some of the latter made shoes in their cells to reduce their debts. Many were confined for drunkenness. In August 1816, the county contracted to have a two-story brick house, 34 by 23 feet, built near the jail, presumably for the use of the jailkeeper. Small sheds containing the keeper's kitchen, a shop, and a woodshed were later appended to the jail.

No illustrations of the East Cambridge jail have been discovered, although Charles Place wrote in 1925 of "a sketch of the elevation . . . fairly correct, though not interesting." It probably was a smaller, simpler version of two of the architect's earlier institutional projects, the Leverett Street Almshouse in Boston and the first design for the Massachusetts State Prison in Charlestown. Bulfinch repeated the small grated windows, cast-iron door, and massive granite blocks of the state prison in this jail.

There was a significant difference, however, in the prisoners' living quarters. In the state prison, inmates were housed in solitary cells, but the smaller scale of the county jail and the shorter length of confinement of those awaiting trial dictated larger rooms shared by two and sometimes three prisoners. Indeed, the East Cambridge jail was less than 100 feet long, and in scale and massing it must have resembled a large and simple Federal house. In this respect, it continued the 18th-century concept of a jail, which was basically domestic in both scale and operation. Only a few years after it was built, significant advances in American prison architecture and organization made it obsolete. The development of two competing systems, the Pennsylvania system of solitary confinement and the Auburn system of congregate work and solitary sleeping (which Middlesex County adopted), eventually changed the look of the East Cambridge prison complex.

Shortly after the jail was completed, work on a house of correction was begun. During the 19th century, jails generally functioned as detention centers for witnesses and persons awaiting trial, while houses of correction, frequently called "prisons," were intended solely for sentenced prisoners. This division of functions was reflected in the separate buildings at East Cambridge.

The original Middlesex County House of Correction was probably also designed by Bulfinch. Very little is known about it, except that it contained 21 cells. By 1834, there were also two workshops in the yard, and by 1839, a new brick addition modeled on the Auburn plan. In 1833, a contractor was allowed to hire prisoners to make boxes for cheese, candles, fish, and other commodities. He paid 25 cents for each prison-

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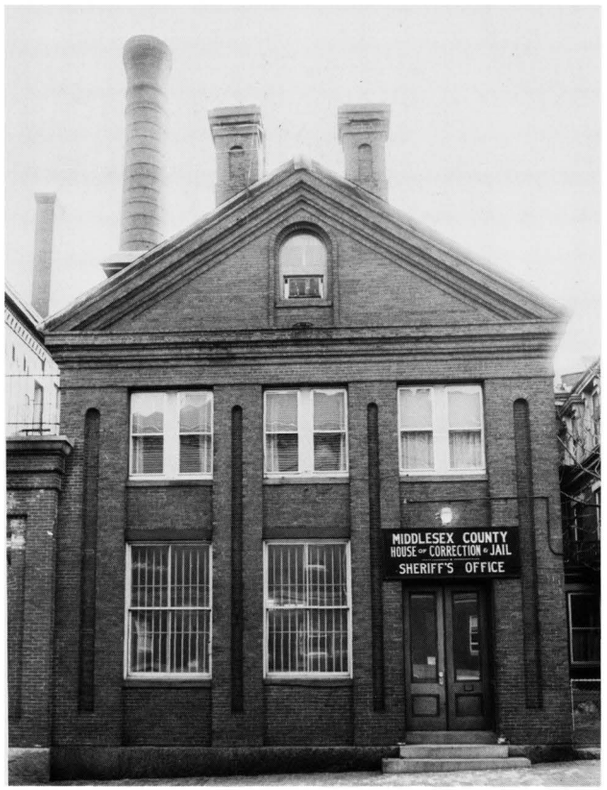

284. Sheriff's office, 46 Thorndike Street. Photograph c. 1964

er's daily labor, and an average of six or seven men were employed as boxmakers. Working conditions were poor, as an 1834 report indicates:

There is no specification in the contract in regard to the number of hours they [the prisoners] should be employed. The custom, however, is to take them from their rooms into the shops a little before sunrise and shut them up about sunset, and require them to work all the time, except when eating their meals, which are furnished them in the shops. (Lincoln and Dwight, p. 67)

The house of correction did not contain a separate chapel until 1842, but moral and religious instruction was supplied every Sunday by theology students. Dorothea Dix was galvanized by the conditions she found in the women's jail one Sunday in 1841 (Fig. 282). As a biographer observed:

To her horror, she found among the drunkards, vagrants, and prostitutes a number of unkempt and shivering women whose only crime was insanity. Their quarters were foul, bare and unheated. The jailer's response that "lunatics" had no sense of cold incensed her, and she brought the matter before the local court in session. The philanthropist Samuel Gridley Howe came to her aid in a newspaper article, and despite angry denials of her charges, heat was provided for the deranged women and their quarters renovated. (Marshall, in James, vol. 1, p. 487)

In addition to triggering a newspaper debate between Howe and the jail physician, Dr. Anson Hooker, about conditions for the insane, Dix's protests resulted in an investigation of the conditions in the East Cambridge House of Correction by a Joint Special Committee of the General Court. Its findings led to the passage of a statute stipulating that the insane be housed separately from criminals.

Dix subsequently expanded her campaign. By 1843, she had chronicled the neglect and cruelty to which the insane were subjected in an eighteen-month survey of every almshouse, jail, and house of correction in Massachusetts. The result was an appropriation by the General Court to expand the facilities of the Worcester State Hospital. During the next three years, Dix traveled more than 30,000 miles to study the treatment of the insane. She was instrumental in founding thirty-two state mental hospitals and inspired the construction of many others in America and abroad.

The tangible results in East Cambridge were the erection of two separate buildings for the insane (see Fig. 281). They were described in 1855:

There are two houses for the insane, one for each sex, both 30 x 40′. They are on opposite sides of the yard, and unconnected with the other buildings of the establishment. The house for the males is two stories high, and that for the females is three stories. In each of these stories there is a middle hall, about 8′ wide, running through the whole length of the building, with rooms for sleeping on each side. There are seventeen of these small lodging-rooms in the house for males, and twenty-six in that for females. The attics are also occupied as dormitories. (Jarvis, Report, *p. 118)*

Jarvis also noted that the buildings were heated by steam, housed thirty-five patients each, and were surrounded by walled "airing courts" for outdoor exercise.

After the county acquired the remainder of the block in 1851, several new buildings went up in rapid succession. Four were completed in 1852, at a cost of approximately $135,000. One was a workshop on the southeast corner of the block; another was an addition to the house of correction containing 245 cells, probably at the southwest corner of the block. While no detailed description exists, it is safe to assume that the cell design followed the Auburn congregate system. This system had been used in the extension to the Massachusetts State Prison in Charlestown and the new Boston jail on Charles Street, both designed by Gridley Bryant and the reformer Louis Dwight and completed in 1851.

The most architecturally significant structures completed in 1852 were the sheriff's office and women's prison on Thorndike Street (Fig. 283). Designed by Ammi Young, these buildings were late Greek Revival in style and constructed of brick on granite foundations (Fig. 284). The facades were defined by slotted brick pilasters without capitals, a motif repeated in the wall and 13-foot arched entrance to the prison yard. The composition was austere and linear, an attempt to apply a classical domestic design to an institution.

In 1860–61, a new 70-by-45-foot wing with 150 cells was added to the twice-enlarged house of correction along Third Street, bringing the total number of men's cells to 268. A contemporary newspaper account noted an innovation: all the cells could be shut and locked simultaneously, minimizing the possibility of escape. This addition was in all likelihood designed by Edward Shaw in 1857 and is known only through the architect's drawings, for which he was paid $190. The stark exterior, constructed of ashlar masonry (probably granite), had simplified Greek Revival details (Fig. 285).

By 1860, the prison reform movement had spurred public interest in the everyday conditions faced by all

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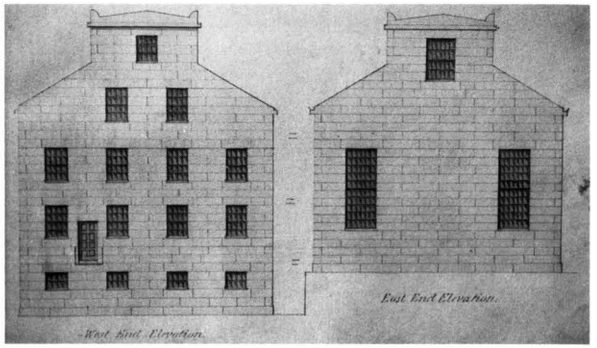


285. House of Correction, 1857, Edward Shaw

inmates, not just the insane. The East Cambridge prisoners circulated a petition calling for better food and sent it to the county commissioners. A Committee on Prisons was formed to hear allegations of abuses. One prisoner, convicted of assault and sentenced to the house of correction for six months in 1858, described his experience:

The salt beef and fish, was bad. It smelt and tasted bad. I went without my dinner several times. The allowance of food was scant, and I have been to the swillbarrel several times, and gnawed off the meat from fresh beef bones, and eaten pieces of brown bread I found there. I saw others do the same. . . . I suffered there from the cold. I was confined one day and one night in "solitary", for speaking, in violation of rules. I could not sleep, as I had nothing to sleep upon, except the stone floor, and I was very cold. I sat on my bucket all night. (Testimony . . . Committee on Prisons, *p. 3)*

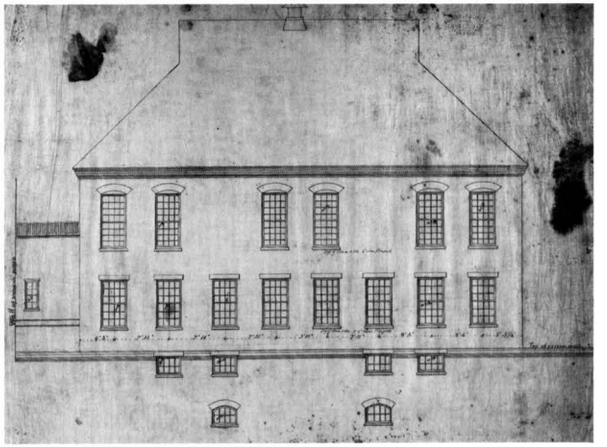
A prison chaplain, on duty since 1855, visited the prisoners two or three times a week, but no Sunday school classes were offered, for most of the inmates were Catholic.

By the beginning of the next decade, the need for new buildings for the jail and keeper's residence became evident, and the General Court authorized the county to borrow $100,000 for that purpose. In 1872, the original Bulfinch jail was demolished, and a new jail, by A. R. Esty, was erected upon the site. The new four-story building included a ground floor of granite blocks salvaged from the old jail and three upper floors of pressed brick. Within the building, tiers of cells were completely surrounded by outer corridors, in keeping with the now familiar Auburn scheme. Each cell measured either 3½ or 4¼ by 7 feet, and was 7 feet high. The 75 cells in the new jail brought the total in the complex to 273 men's and 80 women's cells.

Esty also designed the new keeper's house on the southeast corner of Thorndike and Third streets. This two-and-a-half-story brick house was one of the best examples of the French Second Empire style in East Cambridge (Fig. 286). The granite used in the construction of the foundation, columns, entablature, and lintels was also taken from the demolished Bulfinch jail.

As in the earlier decades, the county prisoners in the 1870s were generally young, male, and serving sentences for drunkenness. In April 1876, for example, there were 24 men and 1 woman in the jail, while the house of correction held 208 men and 35 women. Some 41 of the 268 prisoners were 20 years old or younger, and 65 were 20 to 25 years old. Of those confined to the house of correction, 25 were sentenced for drunkenness, 9 as common drunkards, and 7 for vagrancy. Drunkenness became even more common by 1890, when 1,336 out of 1,591 men and 77 out of 104 women were sentenced to the house of correction for this offense.

286. Keeper's House, 50 Thorndike Street, and jail, mid block on Third Street, both 1872, A. R. Esty. Photograph 1964



287. North (street) elevation, boilerhouse, workroom, and chapel, 1885, Silloway & McKay

More inmates were actively engaged in prison work in the 1870s than in earlier decades. In 1876, 148 male and 5 female prisoners worked as brushmakers, while others served as shoemakers, tailors, painters, and coopers. By 1883, the prison was nearly self-supporting from the profits of the brush business.

In 1882–83, 110 new cells were added to the house of correction in a four-story wing that replaced several buildings ("Bummer's Hall" and the old stable and boiler room) along Spring Street, near the southeast corner of the block. A three-story extension of the workshops was built concurrently.

In 1885, Silloway & McKay designed a three-story brick building to fit between the hospital and women's

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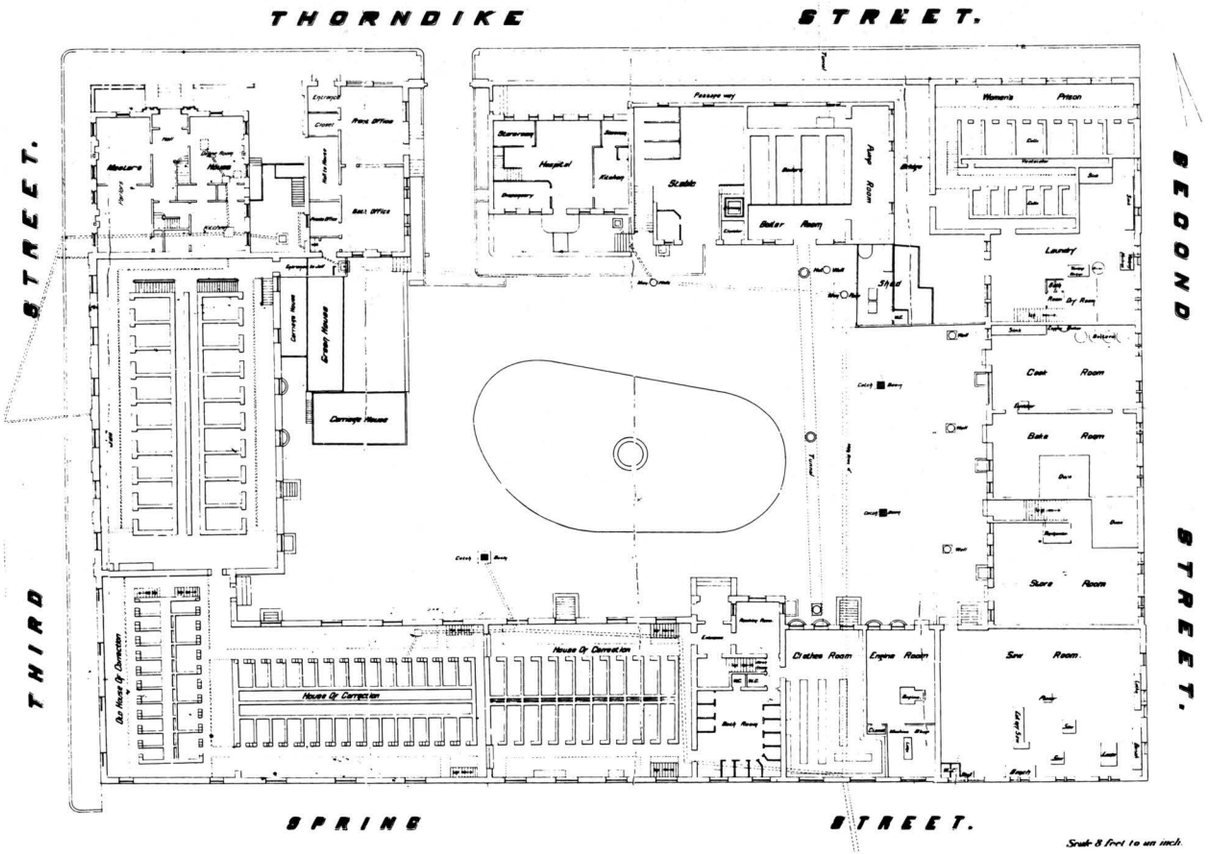

288. Middlesex County jail complex, c. 1885–98

prison on Thorndike Street (Fig. 287). The new building incorporated the prison wall and contained stables and a boiler room on the ground floor, a workroom on the second floor, and a chapel with a separate area for women on the third floor. With its completion, the block's perimeter was filled (Fig. 288) and the facilities brought up to date, as the *Fourteenth Annual Report of the Massachusetts Commissioners of Prisons* (1885) observed: "[There have been] continued improvements in the buildings and surroundings; the prison is now one of the best in the state [and] after that at South Boston, the largest of our county prisons."

In 1887, the women's prison was improved with larger cells and a hospital. In 1898, the prison contained 625 cells. A four-story brick hospital was begun in 1898 and another 30 cells were added to the house of correction in 1899 (Fig. 289).

The 20th century brought only minor renovations and additions until the complex was demolished in 1965. In 1909, a small visitor's building was erected in the courtyard, and in 1912, the rear section of the old jail was made into the Third District Court. The total number of cells was now reduced to 310, and by 1914 the average number of prisoners had dwindled to 270. By

289. House of Correction courtyard, showing new hospital (right). Photograph 1903

1917, the landscaped courtyard in the center of the block was partially filled in with a new power plant to serve all the county buildings (see Fig. 278). By 1929, the dilapidated women's prison and workshops were torn down and replaced with a new building. When a new prison was begun in Billerica in 1930, the Cambridge facility became a receiving station for persons awaiting trial. In 1932, the number of cells in the jail was reduced to 110, in the house of correction to 99, and in the women's prison to 16. In 1965, the entire complex was razed to allow the construction of the present Superior Court building, whose top floors were designed as an annex of the Billerica jail; they were not used until 1982.

The 150-year history of the Middlesex County Jail and House of Correction in East Cambridge reflects both changing county needs and contemporary American theories of prison architecture, particularly the Auburn congregate system. Because the county was concerned with immediate needs rather than long-range planning, the complex was subject to piecemeal expansion, and the block became an amalgam of architectural styles. Probably it was most significant as the catalyst for Dix's movement to improve conditions for the mentally ill.

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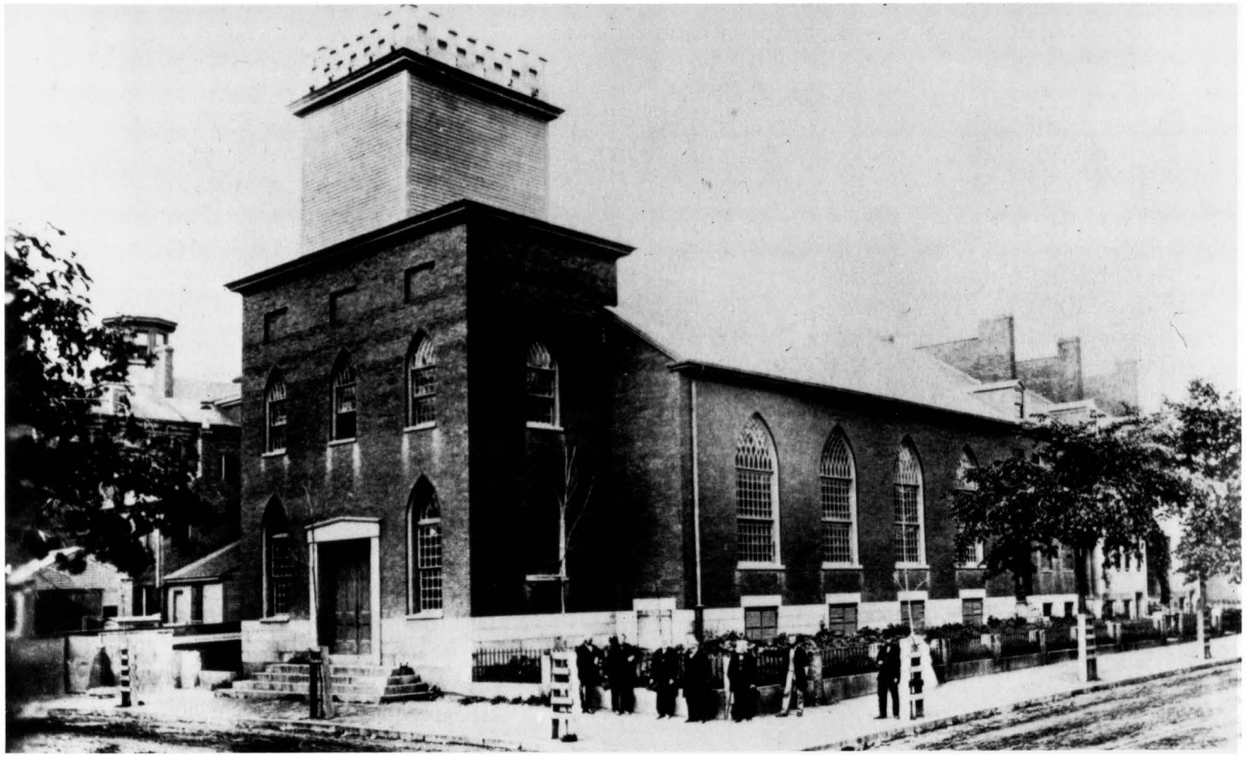
Churches



290. Ebenezer Chapel, Third and Cambridge streets, 1823, demolished 1869

The churches of East Cambridge have changed along with its population, but the sites and some of the buildings have remained the same since the 19th century. As elsewhere in Cambridge, new congregations first met for worship in private houses, schools, or public halls until they prospered enough to erect their own buildings.

The earliest congregation was organized in 1818, and the first church was built in the 1820s. By 1827 the neighborhood had four Protestant congregations and three churches, two brick and one frame. These sufficed until the 1840s, when two more were established, including the first Catholic church in the city.

After the Civil War, several large brick and stone churches were erected — the last ones built in East Cambridge except for the replacement of a church destroyed in the 1938 hurricane. When the cornerstone for Sacred Heart Church was laid in 1874, East Cambridge had six other churches, four of them still used by their original congregations. Today, only three 19th-century churches remain, and all but Sacred Heart have been modified to meet the needs of their new congregations.

The first site to be occupied by a church was the southwest corner of Cambridge and Third streets. The Canal Bridge proprietors donated this 20,000-square-foot lot, which ran all the way to Otis Street, to the Methodist Religious Society in 1823 on the condition that a church be built within two years and a parsonage and school within three. The Methodists, who had organized in 1818, were also the first congregation gathered in East Cambridge. They met initially in private homes and in the Third Street schoolhouse. In 1821 they were joined by a Methodist preacher from England, who came to work at the New England Glass Company and helped the group build a chapel on Gore Street. Opened in 1823, it served a congregation of 70 members for almost a year, until it became apparent that the growing body needed a larger building.

Following the donation of the lot in 1823, Amos Binney, a trustee of the church and a large East Cambridge landholder, advanced the funds to construct a new brick meetinghouse, to be called Ebenezer Chapel. In September 1823, the cornerstone was laid for a building with a central tower and Gothic arched windows; it measured 56 by 50 feet and contained 66 pews when it was dedicated in 1824 (Fig. 290). The church faced Third Street, and its Cambridge Street facade was soon extended by the addition of a parsonage. Two adjoining brick row houses at 262 and 266 Cambridge Street, built in 1829 by Binney, further extended this facade and gave the block a unified effect (see Fig. 164).

A school was built on the other half of the property. Leased to the Wesleyan Academy of Wilbraham, this was the first church-sponsored school in East Cambridge. The building was demolished in 1851 to make way for the present four brick row houses at 55–61 Otis Street.

As early as 1864, the Methodist congregation began to discuss building a new church and procuring a new parsonage, but the response was not encouraging. In

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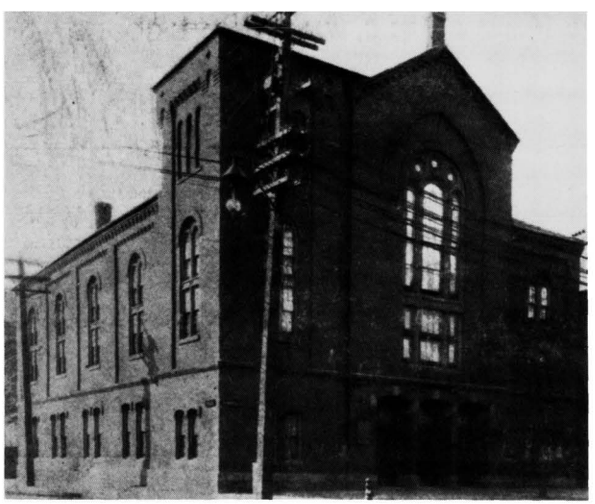
1869, the cornerstone was laid for a new brick church on the same site, but facing Cambridge Street instead of Third. Designed by Abel C. Martin, Trinity Methodist Episcopal Church was a large rectangular building with a square corner tower topped by a wooden spire and tall roundheaded windows marking the sanctuary. In 1889, the wooden spire was removed, giving the tower a somewhat truncated appearance (Fig. 291).

The 1870s were among the most prosperous years for the church; membership increased, and the congregation was very active in temperance work. By 1900, however, the population of East Cambridge was changing, and the church also held Portuguese services. In 1942, it reported that the predominantly Protestant/Anglo-Saxon group that had founded the church was diminishing in East Cambridge, and the congregation moved to a converted dwelling at 72 Fourth Street. The church itself, the home of the longest-lived Protestant denomination in East Cambridge, was demolished in 1952; the land is now a parking lot.

In 1827, the northwest corner of Third and Thorndike streets was sold to the Third Congregational Society (Unitarian) and became the site of the second church in East Cambridge. This 1827 brick meetinghouse still stands, relatively unchanged on the exterior except for the removal of its spire (Fig. 292). It is the oldest church building in East Cambridge and the third oldest in the city — after Christ Church (1760) and the Syrian Orthodox Catholic Church of St. Mary (built as the Universalist Church in Lafayette Square in 1822). One of its early ministers, James D. Green, became the first mayor of Cambridge, in 1846.

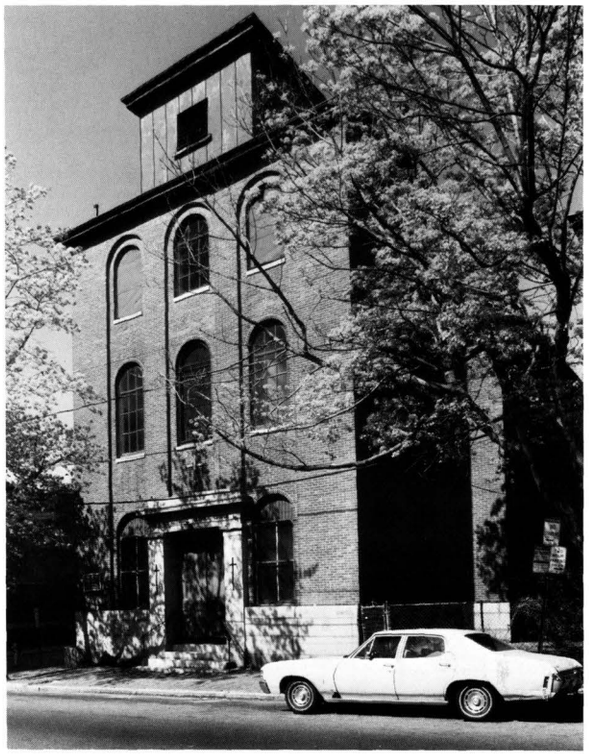


291. Trinity Methodist Episcopal Church, 244 Cambridge Street, 1869, Martin & Thayer. Demolished 1952. Photograph c. 1900 after removal of tower

The society was founded on March 31, 1827, when shares were first sold to raise money to build a church. By May 31, the group purchased a lot, running 60 feet on Third Street and 100 feet on Thorndike Street, and formed a building committee to supervise construction. Two members, Abraham P. Sherman (later the warden of the house of correction) and Atherton H. Stevens (a merchant who built numerous houses on Winter Street), were probably responsible for the design and construction. Committee reports mention no architect, and Sherman and Stevens received the largest payments for the church's construction, which cost just over $10,000. Stevens also purchased the rear 20 feet of the lot and erected a handsome brick townhouse at 59 Thorndike Street (1827–28), using the rear wall of the church as a party wall (see Fig. 155).

Like the vernacular architecture around it, this meetinghouse is conservative in style. It follows the standard plan for Federal churches: a rectangular, gable-roofed meeting hall with a wide central entrance tower surmounted by a cupola. The side walls each have three roundheaded windows; the entrance tower is also three bays wide, with doors and windows set in shallow brick arches. The building recalls Boston's Charles Street Universalist Meeting House (1807), which was probably designed by Asher Benjamin; only the heavy granite foundation and the frame around the center door give evidence of the oncoming Greek Revival style. When compared with a thoroughly Greek Revival structure, such as Alexander Parris' granite First Church (Unitarian) in Quincy, begun the same year, the East Cambridge church seems especially conservative.

Inside, stairs on either side of the entrance lead up to the meeting hall; a single flight of stairs in the center leads down to the basement. The sanctuary has a cove



292. Third Congregational Church, 103 Third Street, 1827, now Holy Cross Polish National Catholic Church

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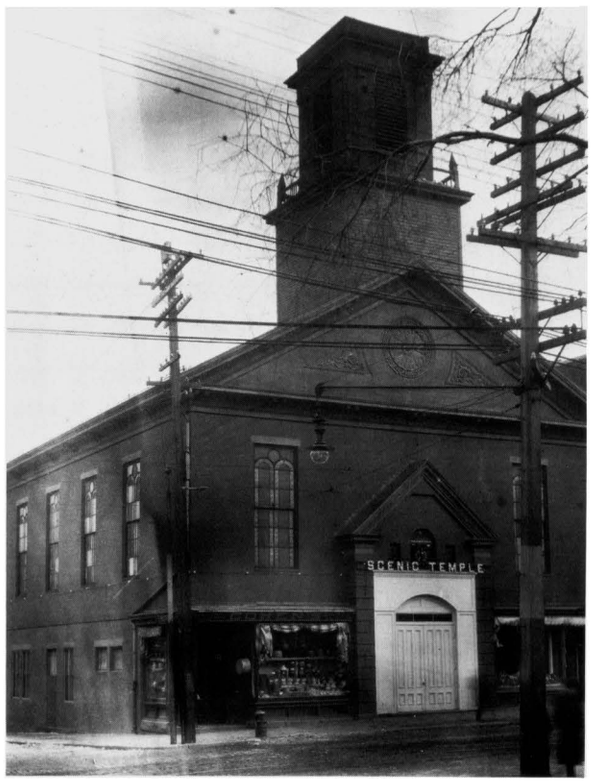
ceiling and a gallery around three sides. The pews, altar screens, and cast-iron columns supporting the gallery are not original but are predominantly 19th century. The stained-glass windows were installed by the Episcopalians in the 1890s; the first window on the right is dedicated to the memory of Bishop Phillips Brooks.

The church remained in Unitarian hands until 1875, when it was converted to a public hall. By this time, the Unitarian population had dwindled, the pastor had resigned, and the congregation had moved to Cambridgeport. In 1886, the Episcopal Church of the Ascension purchased it for a mission to serve new immigrants. In 1940, the church was further transformed when it became the Holy Cross Polish National Catholic Church. It was the second Polish church in East Cambridge (St. Hedwig's was begun in 1907) and reflected the growing importance of Eastern European immigrants in the neighborhood.



293. Second Baptist Church, 315–325 Cambridge Street, 1838, remodeled 1868, 1890. Photograph c. 1890–1917

In 1824, a number of East Cambridge Baptists, weary of traveling to Charlestown or Boston, arranged to hold a Sunday school and preach one evening a week in the Putnam schoolhouse. In 1827, they decided to establish the Second Baptist Church in Cambridge. Almost immediately they erected a wooden meetinghouse (66 by 46 feet) with a 100-foot spire and a bell on the northeast corner of Cambridge and Fourth streets, the third church in East Cambridge. Only ten years later, the structure burned in a fire, which is described in the church records:

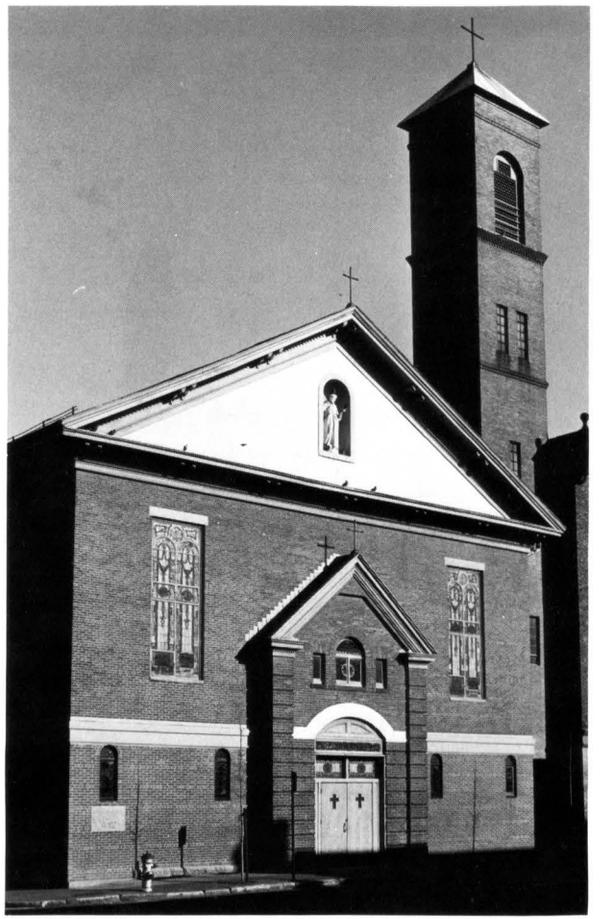
About midnight the meetinghouse of this church and society was discovered to be on fire in the basement, occupied by the New England Glass Company as a storehouse, and when first observed the fire had made such progress as to render it impossible to save anything from destruction in any part of the building.

Thus, in less than two hours, our beautiful house was reduced to a heap of smoldering ruins, together with all the furniture and bell, the Sabbath School library, and all of the furniture of the vestry. (Donallan, p. 34)

In January 1838, a new brick church was dedicated on the same site. Put up quickly with no architect and with very few funds, the new building was plain but substantial and contained 82 pews seating 500 people (see Fig. 435). The sanctuary was a full story above the entrance level, while the vestry and classrooms were on the ground floor.

In 1868, the prosperous congregation undertook alterations that included a new entrance, a 75-foot-high steeple, Gothic windows, and circular pews in the sanctuary. In 1890, the Boston architect Walter T. Paine raised the building 3 feet to increase the capacity of the basement Sunday school from 200 to 500; he also built an addition with a large parlor, study, robing room, and baptistry (Fig. 293).

In 1917, the new Italian Catholic congregation of St. Francis of Assisi bought the church from the Baptists.



294. St. Francis of Assisi Church, 315–325 Cambridge Street, after 1931 remodeling. Photograph c. 1965

It was remodeled at that time and again in 1931 and 1973. The 1931 renovation added the campanile, which has become a Cambridge Street landmark (Fig. 294).

St. Francis of Assisi was established by several Italians in East Cambridge, including Austin and Mary DeGugliemo, with the help of the Franciscan Fathers of St. Leonard's Church in Boston. The church was dedicated in 1917 by its first pastor, Father Anselm

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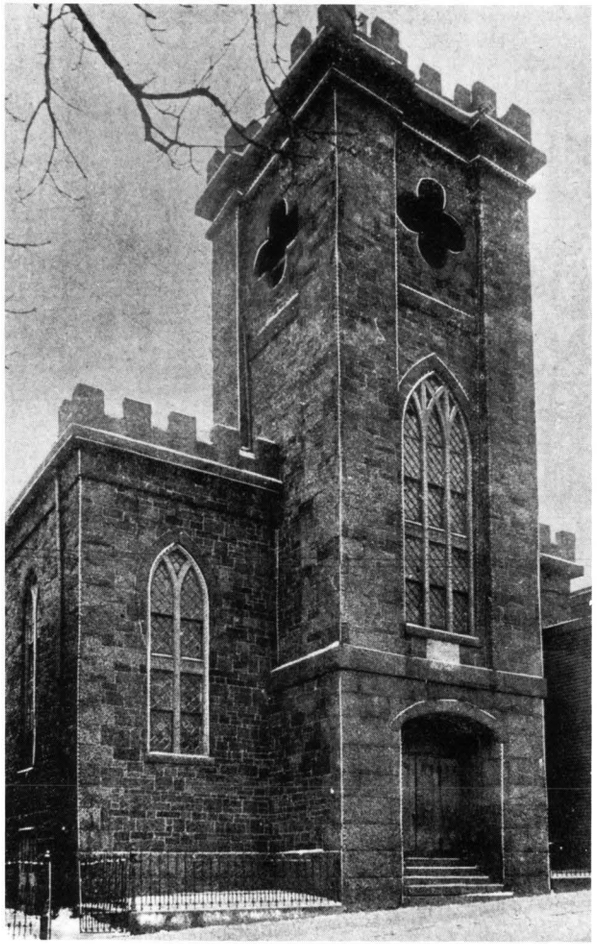
Lenzy. Most of the original parishioners were from the province of Avellino, near Naples, while others had come from Potenza and Rome. The St. Francis of Assisi School on Gore Street graduated its first class of 300 children in 1933 and operated until the 1970s.

The city's first Catholic church was founded in East Cambridge in 1842. By the late 1830s, a Sunday school had been established in the Wesleyan Academy, at the corner of Third and Otis streets. However, Cambridge Catholics still had to go to the cathedral in Boston or St. Mary's Church in Charlestown to attend mass. Soon the increasing number of Catholics required a separate church. On January 17, 1842, East Cambridge Catholics held a meeting to organize St. John's Church. A committee composed of Daniel H. Southwick, J. W. Loring, and William Gleason conferred with Bishop Fenwick, who approved their request. Support for the church grew rapidly, and construction funds were raised chiefly by neighborhood subscription. At the time, the parish included all of Cambridge and Somerville.

In March 1842, a lot was chosen on the east side of Fourth Street, between Cambridge and Otis streets. The Boston architect Richard Bond designed St. John's and the housewright Royal P. Deshon constructed it. (Bond had designed the almost identical St. John's Episcopal in Charlestown in 1841.) Bishop Fenwick presided over the dedication of the building to St. John the Evangelist on September 3, 1843.

St. John's Church followed the basic rectangular meetinghouse plan, with a projecting central square tower containing the entrance (Fig. 295). Built of randomly laid rock-faced granite blocks, the church was medieval in style, with castellated parapets and a tower with Gothic lancet windows and quatrefoil details. This type of early Gothic Revival church was common in the Boston area; its prototype, Old Trinity Church on Summer Street, was designed by George Brimmer in 1828. St. John's also closely recalled the Cambridgeport Unitarian Church of 1834, on Austin Street, now demolished.

In 1846, a rectory was built at 63 Fourth Street; it was demolished in 1972 (Fig. 296). When Sacred Heart opened in 1876, St. John's was used for church-related activities, including a school. It was taken down in 1934, and the site is now a playground.



295. St. John's Church, 58 Fourth Street, 1842, Richard Bond. Demolished 1934

296. St. John's Rectory, 63 Fourth Street, 1846, demolished 1972. Photograph 1968

The next site occupied by a church was the northeast corner of Second and Thorndike streets, where in 1843 the Evangelical Church built a simple, towered meetinghouse on the edge of the flats along the Charles River. The adjacent row of six wooden houses with Ionic porticos at 36–46 Second Street was built at the same time, completing the block facing the courthouse square. In 1876, the church was moved to Davis Square in Somerville, where it became the Day Street Church. The site is now occupied by a loft building constructed for Irving & Casson in 1903. With the completion of the Evangelical Church, there were six churches in East Cambridge — all within two blocks of the courthouse.

The present St. Hedwig's Roman Catholic Church, at 99–101 Otis Street, stands on property first devel-

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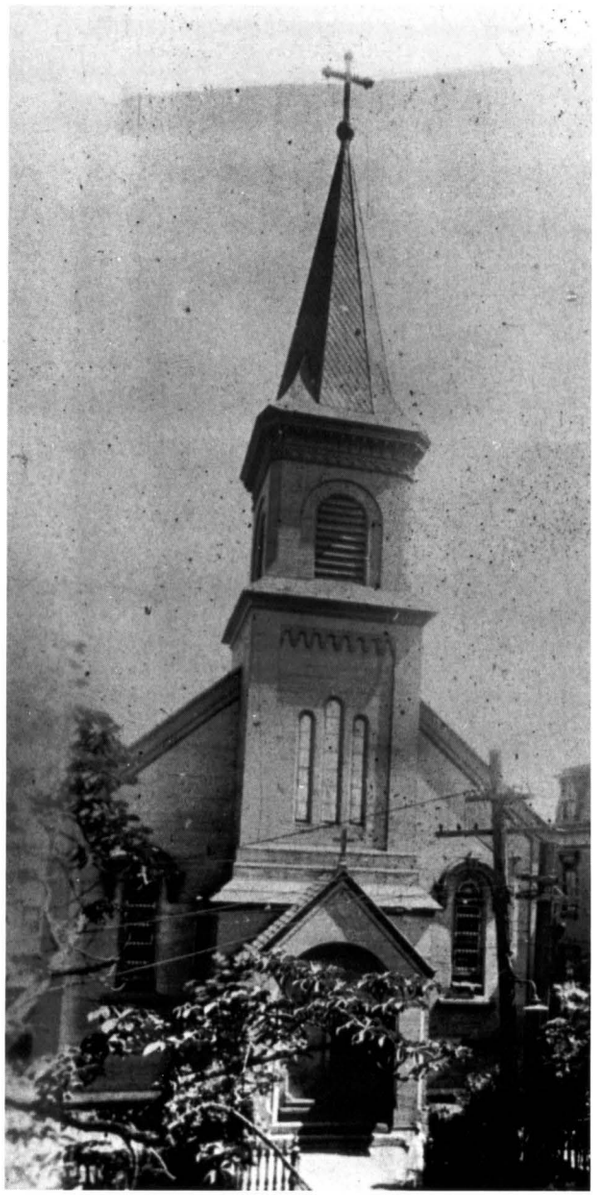


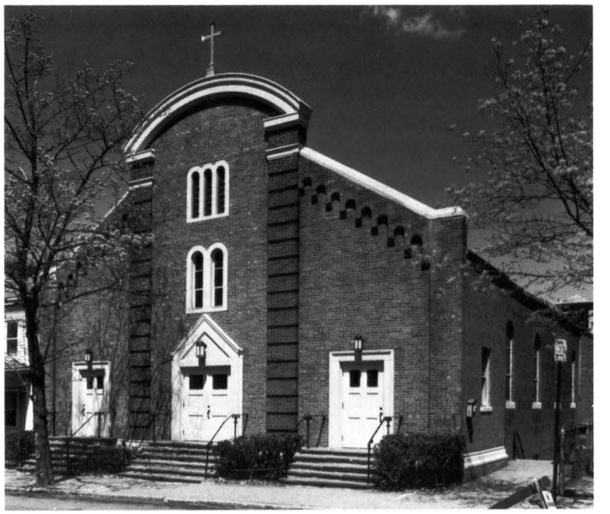
297. Second Universalist Church, 99–101 Otis Street, 1865, Hosea B. Dennison. Demolished 1938

oped by the Second Universalist Society. Founded in 1823, this congregation met first in the schoolhouse between Bridge and Gore streets, then at the Third Congregational Society (Unitarian) on Third Street. In 1834, the Second Universalists rented Berean Hall, on Cambridge Street. After nine years they purchased and enlarged this property, converting it to a meetinghouse (see Fig. 318).

In 1865, St. John's Literary Institute bought Berean Hall, and the Second Universalists erected a new church on Otis Street, just one block away. Designed by a local architect, Hosea B. Dennison, and completed in 1866 at a cost of $14,000, the new Second Universalist Church seated 550 and held a handsome organ made by S. S. Hamill of East Cambridge (Fig. 297). The simple rectangular plan, central tower, and pitched roof of the structure were characteristic of earlier 19th-century churches in the Boston area, yet the bolder medieval style and more vertical massing were related to midcentury Victorian architecture. Although the church was made of wood, the facade was stuccoed to give the impression of masonry. It seems reminiscent of A. R. Esty's brick Romanesque Revival Prospect Congregational Church, built on Prospect Street fifteen years earlier.

In 1907, the church was sold to St. Hedwig's, a Polish congregation. By that time, the Polish population had grown to about a hundred families, warranting the establishment of a separate church. The Reverend Henryk Zmijewski, its first pastor and founder, was appointed by William Cardinal O'Connell. After the turn of the century, other Polish Catholic churches were established in the Boston area: Hyde Park (1913), the West End (1917), Chelsea, and Lowell. Like the other ethnic churches in East Cambridge, St. Hedwig's offered immigrants services conducted in their native language. In 1914, the church established schools on Otis Street and on Charles Street. The severe damage caused by the hurricane of 1938 necessitated the demolition of the old church. The present brick building, by F. F. McDonough, built the following year, is the only 20th-century church in East Cambridge (Fig. 298).

The Catholic Church of the Sacred Heart of Jesus, on the corner of Sixth and Otis streets, is the only



298. St. Hedwig's Church, 99–101 Otis Street, 1939, F. F. McDonough

East Cambridge church that has retained its original congregation (Fig. 299). In 1873, Father John O'Brien, the pastor of St. John's, began a campaign for a new church. The cornerstone was laid on October 4, 1874. The basement opened for services on November 12, 1876, and the church was formally consecrated by Archbishop Williams on January 28, 1883.

Sacred Heart was the largest and most expensive church built in East Cambridge, costing more than $200,000. Designed by Patrick W. Ford, the architect of many Catholic churches in New England, it is constructed of rough-faced blue slate trimmed in granite. The highly picturesque massing, corner tower, and ornate detailing indicate the shift to the Victorian Gothic Revival style (Fig. 300). Inside, the spacious nave was flanked by galleries, which allowed a capacity of 2,000. The focal point was an elaborate, pinnacled marble and alabaster altar designed by Peter Paul Pugin, son of the famous Victorian Gothic Revival architect A. W. N. Pugin (Fig. 301). Carved in Cheltenham, England, by R. L. Boulton and Sons, it was installed in 1881. A contemporary admirer described this elaborate Gothic Revival altar as "the plenitude of magnificence — a masterpiece of human art." Stained-glass windows,

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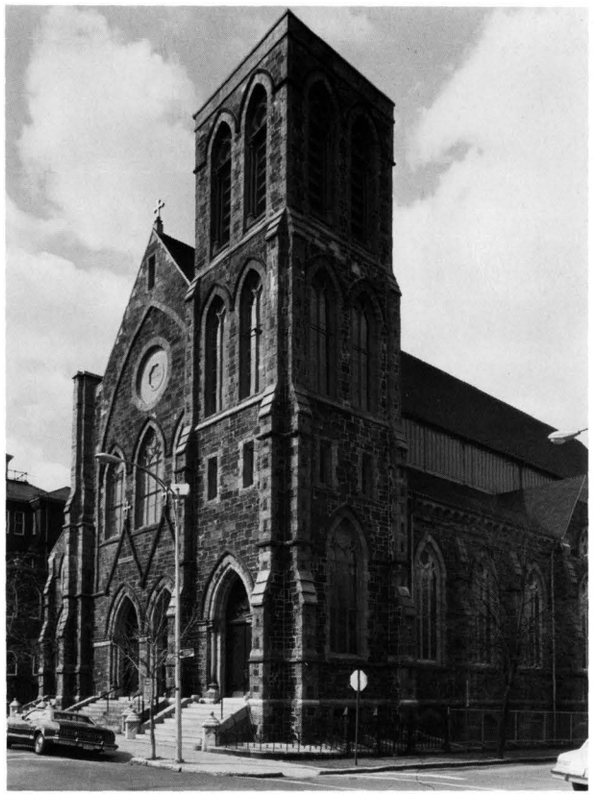
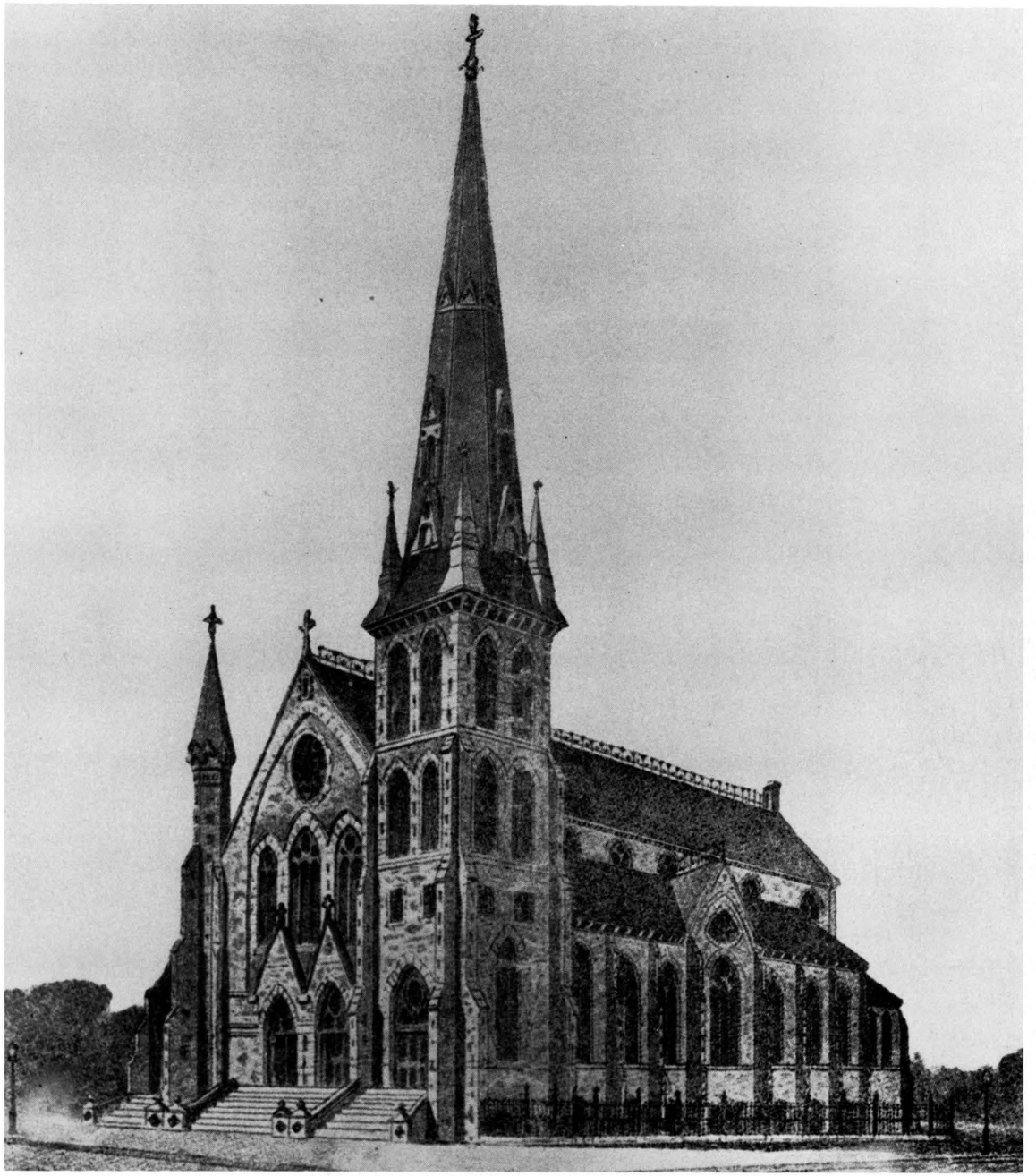


299. Church of the Sacred Heart of Jesus, 39 Sixth Street, after removal of spire



300. Sacred Heart Church, 1874, Patrick W. Ford, as originally built

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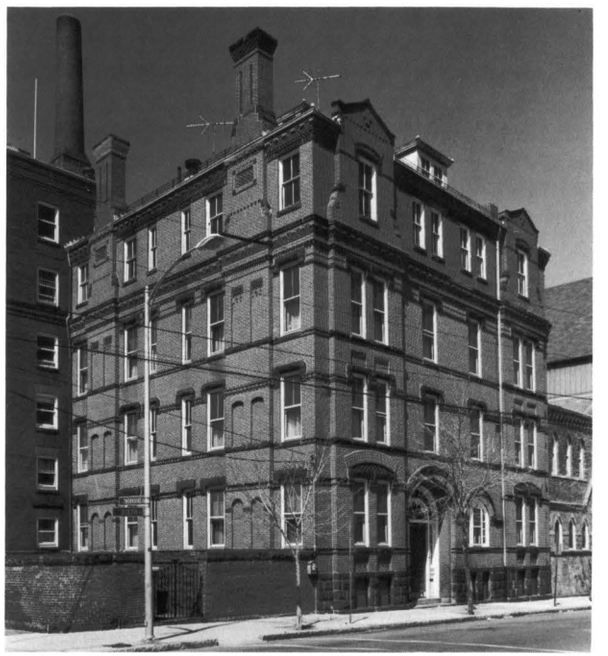
black walnut galleries, statues of the apostles, and a frescoed ceiling completed the lavish interior decor.

The building survives today in an altered form: the upper portion of the steeple was removed in 1961, and the interior was extensively remodeled after a fire in 1963. Fortunately, the altar escaped unscathed.

Other buildings affiliated with the church were later constructed on the same block, making a complex of church structures unique in East Cambridge. These include the handsome four-story brick parish house (1885), at the corner of Sixth and Thorndike streets, and the school and convent behind the church (1902) (Fig. 302).

The congregation remained primarily Irish until 1900, but the increase in Polish, Portuguese, and Italian immigrants created a need for ethnic parishes. Father O'Brien encouraged the establishment of Portuguese and Polish parishes within the boundaries of Sacred Heart, and eventually these groups built their own churches. The ethnic churches provided sanctuary for immigrants who wished to preserve native traditions, particularly through fraternal clubs and societies. Some of these groups remained at Sacred Heart, so that the congregation today reflects the ethnic diversity of East Cambridge.

301. Interior, Sacred Heart Church, with altar designed by Peter Paul Pugin, 1881



302. Sacred Heart Parish House, 51 Sixth Street, 1885, architect unknown

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Schools

303. Third Putnam School, 86 Otis Street, 1887, James Fogerty. Photograph 1968

As early as 1811, the citizens of Lechmere's Point petitioned the town government to establish a school in their district. Some facilities were provided in 1812, but it was not until 1818 that the increasing population warranted the construction of a school. Each decade thereafter brought a new schoolhouse. In 1825, the first Putnam School was built on Otis Street, followed by the Thorndike School in the 1830s, and the Otis School and a replacement Putnam School in the 1840s. By 1845 there were four public schools in East Cambridge, but overcrowding continued to be a problem. Teachers were responsible for as many as 90 students at a time, so that "the tax upon the teacher's strength and patience is unreasonably great and the instruction necessarily imperfect," as described in the 1845 *Cambridge School Committee Report.* In 1843, a high school was established in East Cambridge, but attendance was low compared to that in other wards, and high school instruction was later consolidated citywide.

The early school buildings were domestic in scale, but after 1840 they were larger and had more architectural style; the most prominent was the third Putnam School (1887). Today, no 19th-century schools remain in operation; the Robert F. Kennedy Elementary School (1969), on Thorndike Street, is the only public school now serving East Cambridge.

The first school in East Cambridge was the Third Street or North Alphabet School (1818), on the east side of Third Street between Winter and Gore streets. It was a modest one-story wooden structure for which the town contributed $400; the remainder of the cost was raised by subscription. The School Committee described its primitive condition twenty-seven years after it was built:

*It is the oldest school-house in the Ward, and the worst in the town; a dirty looking affair, shamefully disfigured in front, presenting a melancholy contrast to that physical and moral cleanliness and elevation of character which our common schools are expected to secure. The entry of the building is used for a coal-closet, and the air of the school-room, having no means of ventilation, is often insufferably impure. (*School Committee Report, *1845, pp. 15–16)*

The overwhelming majority of its students were the children of Irish laborers in the glass factories. In 1848, only 3 percent of the children in the Third Street School had been born in this country.

In 1825, the first Putnam School was built on the site of the Revolutionary Fort Putnam, at the southwest corner of Otis and Fourth streets. It was a two-story frame schoolhouse of modest dimensions (42 by 23 feet). The town contributed $550 of its cost, and the remaining $800 was raised by the community. The lower room housed a primary school of 40 to 50 students, while the upper room contained a middle school

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of 60 to 70 students. By 1847 the building had become too small, and it was moved to Third Street to replace the outmoded Third Street School, which was demolished.

A new brick Putnam School, costing $11,500, was erected on the empty site in 1848. Designed by Cambridge architect Isaac Melvin in a late Greek Revival style, this three-story building was almost twice as large as its predecessor and could serve 600 students. The first floor contained two classrooms for the lower grades and a wardroom. The second floor accommodated the grammar school, with a capacity of 180. The appearance of this building is known only through the 1879 bird's-eye view.

By the 1880s, the second Putnam School had become dilapidated and was replaced by an even larger building, which still stands. Designed by James Fogerty in 1887, the third Putnam School was made of pressed brick with sandstone trim and was capped by a hip roof punctuated with gables and dormers (Fig. 303). The prominent arched entrance, active massing, and classical ornament make the school a fine example of the domestic Queen Anne style adapted to a larger institutional building. The three-story school contained thirteen classrooms and a large assembly hall.

In 1971, when the Kennedy School on Thorndike Street was completed, the Putnam School was closed. It was reopened in 1983 by the Cambridge Housing Authority, having been adapted by Monacelli Associates for elderly housing.

The first Thorndike School was a one-story structure built in 1832 on the north side of Thorndike Street between Fourth and Fifth streets. In 1840, a second story was added. The lower floor contained a single room for the 90-seat alphabet school, while the large room upstairs held a middle school for 50 students. In the late 1840s, a majority of Thorndike pupils were the children of Irish immigrants, who by 1850 made up 23 percent of East Cambridge's population.

By 1859, the old building was dilapidated and considered no longer suitable for children. A replacement, at the northeast corner of Thorndike and Sixth streets, was dedicated in 1861. This three-story brick building contained one primary, two alphabet, one middle, and

304. Ice rink behind the Thorndike School. Photograph c. 1930

one grammar school classroom. In 1912, the building was sold to the Sacred Heart parish and was later torn down to make way for the Cardinal O'Connell branch of the Cambridge Public Library (1938).

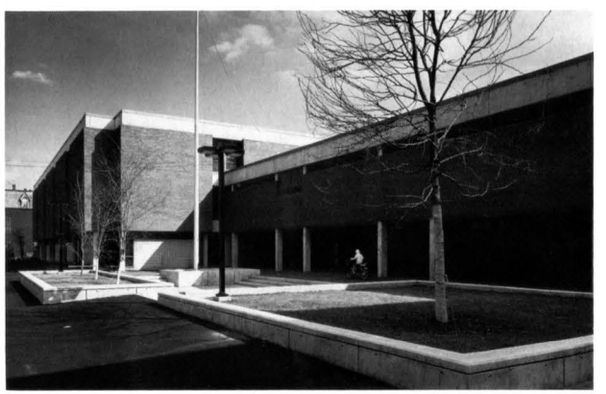
The third Thorndike School was completed in 1912 at 158 Spring Street, between Sixth and Fulkerson streets. This two-story brick structure by Charles R. Greco contained 21 classrooms and met the needs of both the schoolchildren and the older residents of the district. An auditorium served as a community meeting space, and the school housed an extensive adult education program, particularly for recent immigrants. Large playing fields, part of which were flooded for ice skating in the winter, surrounded the school (Fig. 304). The building was demolished in 1968, and in 1972 the brick and concrete Kennedy School was completed on the same spot (Fig. 305).

The first Otis School was built in the spring of 1843 on the north side of Otis Street midway between Fifth and Sixth streets. The town paid $5,400 for this towered, wooden two-story school, which was described as "quite a magnificent structure" (*School Committee Report*, 1845, p. 14). A middle school and a primary school, each for up to 80 students, occupied the first floor, while a grammar and high school for 148 students occupied the second. The high school was abolished in 1847 when the School Committee decided to build a central high school on Broadway.

In 1859, the Otis School burned down. It was replaced the following year by a two-story brick Italianate building described as "plain, but substantial and convenient" (*School Committee Report*, 1860, p. 151) (Fig. 306). In 1914, St. Hedwig's Church purchased the building to provide East Cambridge with its first Polish Catholic school. This closed in 1954; a private home now occupies the site.

In 1847, school capacity in East Cambridge was 777, divided among nine buildings, only one of which was considered to be in excellent condition. The city also rented rooms in the Methodist Academy Building on Otis Street for the Eastern Primary School, which enrolled 105 students. In 1848, the School Committee observed that although this school was "kept in a hired room ill-suited to the purposes of a school, and consisting of two-thirds Irish children, it is one of the best in the city" (*School Committee Report*, 1848, p. 63). The same year, other schools also had high numbers of foreign children, reflecting the vast influx of immigrants in the 1840s. The 1849 *School Committee Report* vividly described the situation in the Third Street School:

A portion of the Irish children are bright and docile. But their temperament and habits are so diverse from those of the children of our native citizens in general, and it is difficult to bring them under the same discipline in respect to order or attention to their lessons. . . . It is pleasing to cherish a hope that the off-



305. Robert F. Kennedy School, 158 Spring Street, 1969, Paul G. Feloney. Photograph 1972

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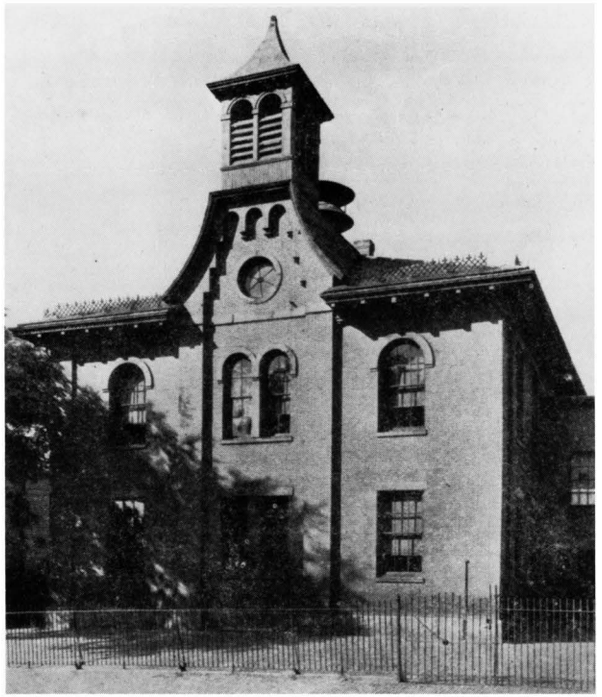

306. Second Otis School, 125 Otis Street, 1860, demolished

spring of our foreign population in the forming period of life, may be assimilated to those of our native citizens, be trained to a knowledge of our institutions, and become capable of appreciating them.

To meet the needs of the growing population, three more public schools were constructed in East Cambridge in the last quarter of the 19th century. After the demise of the Third Street School, the Gore School was erected in 1871 for families who lived north of Cambridge Street (Fig. 307). Designed by H. B. Dennison, the three-story brick school was much larger than its wooden predecessor. It served East Cambridge until 1924, when the St. Francis of Assisi Church bought it for a parochial school. In 1958, the old building was demolished, and a new school was built on the site. This was closed in the 1970s, although it reopened briefly as a public elementary school.

The Lassell Primary School, named for a prominent Cambridge teacher, was completed in 1881 on Charles Street between Fifth and Sixth streets. Designed by John Quinn, this simple two-story wooden building had four rooms. In 1914, the school was converted to parochial use by St. Hedwig's Church.

The Taylor School, named for School Committee member Dr. John B. Taylor, stood on Charles Street at the corner of Lowland Avenue (now Sgt. Edward A. Lopez Avenue). Designed by C. Herbert McClare in 1895, the large three-story brick school included ten classrooms, two recitation rooms, and an assembly hall. After 1937, the school was closed and the building demolished; the site has become a playground.

In addition to its public schools, East Cambridge had a number of private and parochial schools. The first, built in 1828, was the Methodist school at the corner of Third and Otis streets that was leased to the Wesleyan Academy of Wilbraham. Rooms in the brick academy building were also leased to other private schools. The most interesting one was the East Cambridge Female School, begun in 1837. This was the earliest school in East Cambridge organized exclusively for girls and attracted an enrollment of 73 in its first two years: 47 from East Cambridge, 17 from Cambridgeport, and 9 from other towns. While little is known of the school's operation or how long it continued, an 1839 catalogue indicates that it offered a full academic curriculum for $4 a quarter, as well as individual classes in needlework, landscape drawing, and mathematics for $1 each.

Although large numbers of Irish Catholics began arriving in the 1840s, parochial schools were not established in East Cambridge until the beginning of the 20th century. The question of separate Catholic schools was discussed throughout the country. Many felt that parochial education doubly taxed parishioners, who still had to support public schools, and some Catholic immigrants, eager to Americanize their children, looked favorably on public education.

These opposing views were strongly debated in Cambridge. Father Thomas Scully of St. Mary's parish in Cambridgeport was among the strongest proponents of parochial education in the archdiocese, and he began to build schools in 1870. His cause was bolstered in 1875, when the Vatican issued an instruction urging bishops to build schools in every locality, and soon Father Scully refused the sacraments to parents who continued to send their children to public school.

In East Cambridge, the Reverend John O'Brien was an equally strong supporter of public education and served on the Cambridge School Committee from 1872 to 1880. He once said, "I hope the day will never come when I shall be obliged to build a Catholic school." He continued to resist until 1901, when he at last authorized a brick convent and girls' grade school to be built behind his church and rectory. In 1912 Sacred Heart acquired the vacant Thorndike School, at the corner of Sixth and Thorndike streets, and opened a boys' school. The church also sponsored a coeducational high school from 1945 until 1964.

As already noted, parochial schools were also operated by St. Hedwig's Polish Catholic Church between 1914 and 1954 and by St. Francis of Assisi between 1925 and the mid-1970s.

307. Gore School, 60 Gore Street, 1871, Hosea B. Dennison. Photograph 1947

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308. Niagara Company (Engine 3), 251 Cambridge Street, 1850

309. Engine 3 and police station, 40 Sciarappa Street, 1871–73. Photograph 1883

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Other Civic and Institutional Buildings

The municipal buildings in East Cambridge are considerably less imposing than the county buildings, although the fire stations have some architectural interest. Clearly, the city chose not to compete with the county in this respect.

The first fire brigade was the Niagara Company, Engine 3, which built an engine house on Cambridge Street near Third in 1832. In 1850, the company occupied a new brick engine house that still stands at 251 Cambridge Street (Fig. 308); the carved wooden eagle from the old building, measuring 5 feet across, was "newly gilded" and installed below the cornice. The engine house was expanded in 1862, when a new steam fire engine was placed in service. The present third floor was added after the company moved to a new firehouse on Fourth Street in 1871.

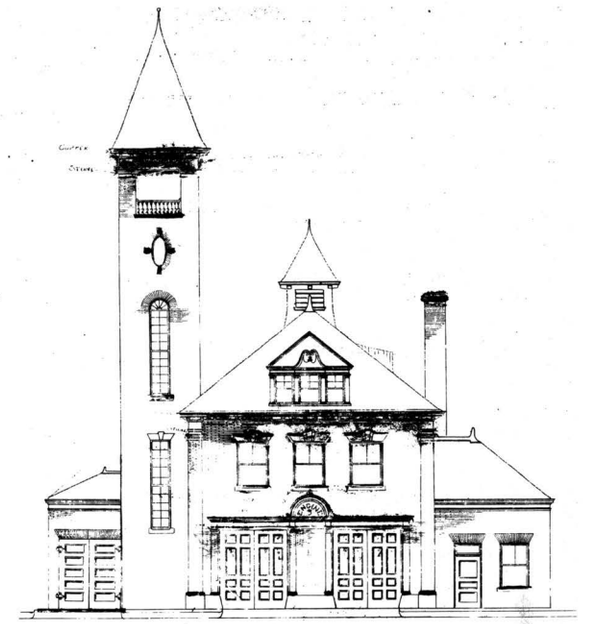
The first municipal building was a combined fire and police station, built between 1871 and 1873 at 40 Fourth Street, just north of Cambridge Street (Fig. 309). This three-story brick structure held a multitude of civic functions, including a wardroom and a branch of the library (Fig. 310). In 1893, the building was extended to Gore Street to provide a carriage entrance for the police station. C. H. McClare designed the Gore Street facade, which remains intact. The first floor of the Fourth Street facade has been completely changed and the building no longer serves its original function.

The next fire station was built in 1892 at Third and Otis streets. Designed by John E. Muldoon, this brick and sandstone station stood two stories high with an 85-foot hose drying tower (Fig. 311). The main floor could accommodate six horses and had a "cosy smoking-room" for the firemen. The community took great pride in this station, but it was only a few years old when it was demolished by the county for the present Registry of Deeds.

In 1895, Muldoon submitted plans for a new Engine 3 fire station at 35 Third Street, at the corner of Gore (Fig. 312), on a lot given to the city by the county commissioners. Also built of brick and trimmed in stone, the new Colonial Revival station had a good, almost Federal, Palladian window on the upper part of the facade. The building was recycled in 1979 to serve as a municipal garage.

The newest fire station is at 173 Cambridge Street, opposite the Registry of Deeds. Designed in 1977 by the firm of Hill Miller Friedlaender Hollander, the red brick station has a staggered facade and occupies the east end of the block between Gore and Cambridge streets (Fig. 313).

The Cardinal O'Connell branch of the Cambridge Public Library occupies the old site of the Thorndike and Sacred Heart schools on the northeast corner of Sixth and Thorndike streets. This building, designed by McLaughlin & Burr in 1938, is a simple, rather satisfying example of the 1930s Colonial style used so



311. Elevation, Engine 3, Third and Otis streets, 1892, John E. Muldoon. Demolished 1895

310. East Cambridge branch, Cambridge Public Library, 40 Fourth Street. Photograph c. 1890

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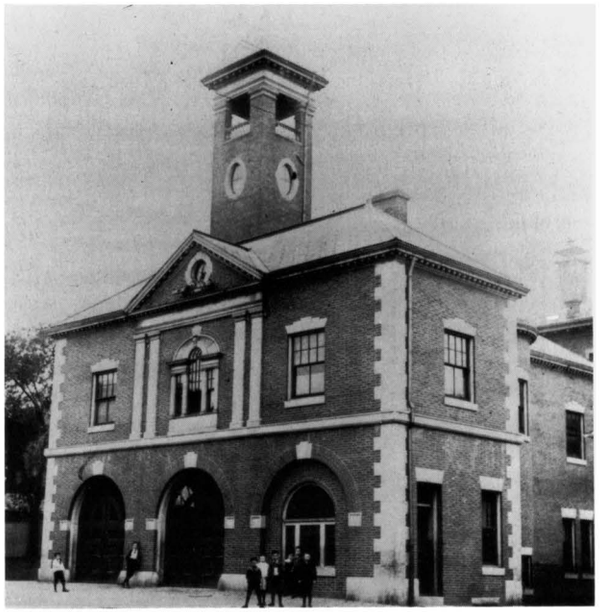

312. Engine 3, 35 Third Street, 1895, John E. Muldoon

313. Fire station, 173 Cambridge Street, 1977, Hill Miller Friedlaender Hollander

314. East Cambridge Post Office, 306 Cambridge Street, 1909. Photograph 1969

often for schools and public buildings. Constructed in 1939, at about the same time as the Third District Court, the library is considerably more successful, probably because of its lesser pretensions.

The East Cambridge post office was housed in a series of buildings along Cambridge Street during the 19th century, but in 1909 a new post office was erected at 306 Cambridge Street (Fig. 314). A diminutive building only 25 feet wide, the facade was Classical Revival, with two monumental doorways flanking a keystoned central window and a complete entablature and cornice capped by a stepped parapet. It was demolished in 1977 for an addition to the East Cambridge Savings Bank.

Meeting Halls

A number of meeting halls were built in East Cambridge in the 19th century. They were generally large spaces on the upper floors of commercial buildings. Even when a fraternal or religious organization owned the building, stores typically occupied the ground floor. The first edition of *East Cambridge* singled out four important halls for discussion; none remains today, but their histories are included here.

Palmer's brick grocery store, at 26 Gore Street (1839) on the corner of Second Street, was typical of this trend and contained the earliest known meeting hall in East Cambridge (see Fig. 327). Approached by only one stairway, the hall occupied the full 50-by-34-foot top floor. The two end bays had flat plaster ceilings, while the three center bays had a handsome plaster vaulted ceiling with a simple but heavy wooden cornice. There were two fireplaces at the rear of the room and a continuous bench along the walls. The Greek Revival mouldings and the exposed collar beams suggest that the hall may have been created some time after the store was built, perhaps in 1843, when the assessed value of the building increased.

Tax records and deeds indicate that John Palmer, a grocer, built the structure in 1839 and owned it until 1881. From at least 1847 until 1853, the Odd Fellows used the hall for their monthly meetings. It was also used by various temperance organizations as they gained prominence in the 1850s and 1860s. The building was demolished in 1977 for the current fire station.

Another upstairs meeting hall was in a handsome three-story Greek Revival brick building at 18–22 Second Street, on the southeast corner of Second and Cambridge streets (see Fig. 322). Built in 1853 for the new Lechmere Bank, this structure originally stood on the southwest corner of the same intersection. The modest hall occupied one third of the third floor and was covered by a simple cove ceiling. In the 1850s, the Niagara Literary Institute held monthly meetings there, and in the 1860s it became known as Sons of Temperance Hall, because at least four temperance societies met there. As with other halls in East Cambridge, little on the exterior of the building indicated the existence of a hall inside. The building was demolished in 1964; a more complete history appears in the discussion of East Cambridge banks.

Some halls, built for specific organizations, were more elaborate. The Odd Fellows Hall at 217 Cam-

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bridge Street, built in 1862, still retained much of its original character when it was demolished in 1971 (Fig. 315). Only 30 feet wide, the facade was organized in three bays, with a profusion of ornament — brick quoins, paired arched windows, inset cross designs, and curious round windows in the mansard roof.

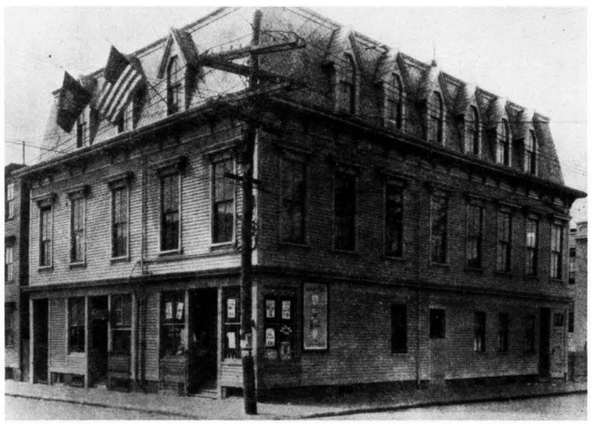
The principal lodge room, 30 by 45 feet, at the rear of the third floor, had a cove ceiling 15 feet high, an elaborate plaster medallion, and a decorative chandelier; this room retained much of its original furniture and character as late as the 1960s (Fig. 316). The second floor probably served as a social hall, with kitchens and offices, while stores occupied the ground floor. Although the building was built by the Odd Fellows, Masonic organizations such as the Putnam Lodge also used it.

Another hall built for a specific organization was the German Order of Harugari at 65–67 Sixth Street on the corner of Spring Street, built in 1873 and demolished in 1981 after a fire (Fig. 317). This frame structure was divided horizontally into three distinct sections, each with a widely differing use. The first floor contained a store; the second floor, which had the highest ceilings, contained the meeting hall, complete with a stage; while the mansard roof contained the kitchen, offices, and a large dining hall. Two large trusses that spanned the 60-foot length of the second-floor hall were partially exposed in the third-floor dining room. The hall was sold to the Polish National Building Association in 1925. When it was demolished in 1981, East Cambridge lost the last of its 19th-century meeting halls.

The final hall that must be discussed is St. John's Literary Institute (1889), at 271–277 Cambridge Street, between Third and Fourth streets. Since its founding in 1854, this Catholic organization had rented space in a series of private buildings, gradually occupying larger, ever more formal meeting spaces and finally constructing a substantial brick building of its own.

The institute's first location was simply a loft over a butcher store at the corner of Gore and Bridge streets. In 1855 it moved to Reed's Hall, a three-story brick building on Bridge Street that was considered one of

315. Odd Fellows Hall, 217 Cambridge Street, 1862, demolished 1971. Photograph 1970



317. German Order of Harugari Hall, 65–67 Sixth Street, 1873. Demolished 1981

316. Lodge room, Odd Fellows Hall, 217 Cambridge Street. Photograph c. 1965

318. Berean Hall, formerly the Second Universalist Church, 271 Cambridge Street. Date of construction unknown; rebuilt c. 1843, c. 1865. Photograph 1904

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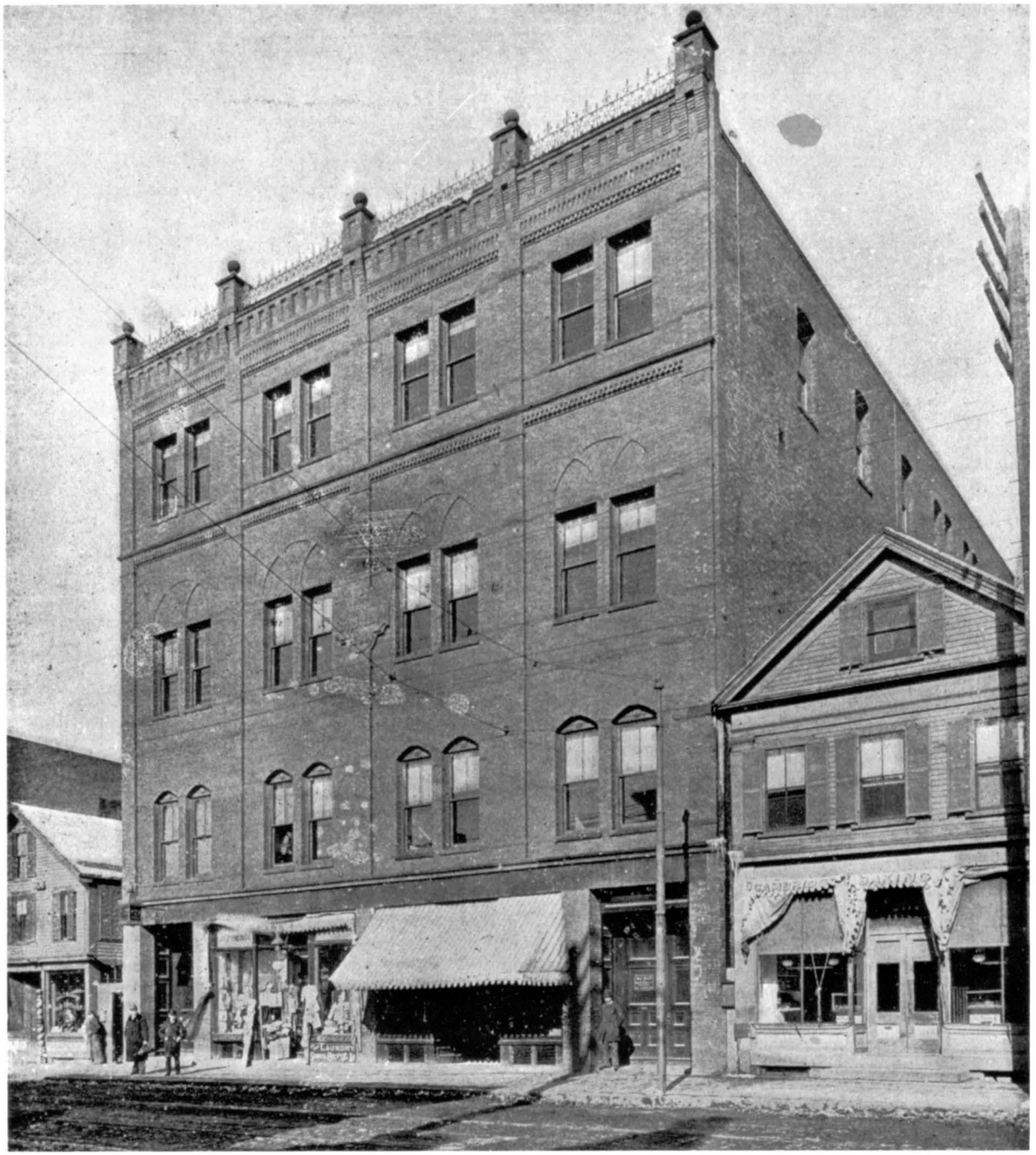

319. St. John's Literary Institute, 271–277 Cambridge Street, 1888, James Fogerty. Burned 1942. Photograph 1904

the most important commercial buildings in East Cambridge at the time (see Fig. 328). The institute rented the upper floors, which included a hall, while a grocery and a boot and shoe store occupied the ground level. In 1857 the institute moved again, this time to First and Cambridge streets (see Fig. 330). In 1865 it purchased its first building, the Second Universalist Church, known as Berean Hall, at 271 Cambridge Street (Fig. 318). The institute quickly modified the building while renting first-floor space to various businesses. Tailored to the specific uses of the institute, this building was the first to meet its needs for more than just a few years.

In 1888, Berean Hall was moved to another location, and the institute replaced it with an elegant four-story brick structure by the architect James Fogerty (Fig. 319). The building was the largest and most impressive of East Cambridge's 19th-century halls and towered over its neighbors on Cambridge Street. Although all the windows were the same size, each floor was articulated differently; the third floor, which contained the main institute space, had the most elaborate window treatment and the tallest ceilings.

The new building contained a meeting hall, gymnasium, stage, and numerous auxiliary rooms above retail stores on the first floor. In 1890, the top floor was rented to the city for a school, while the society used the gymnasium as its meeting space and headquarters. In 1899, the society remodeled parts of the interior to provide better facilities for presenting minstrel shows. The gymnasium and its immensely popular basketball team became the focus of the society.

By 1920, however, the institute had ceased to function, and the building was taken over by the East Cambridge Catholic Club, a group organized to "promote the physical, social and educational welfare of the young men of East Cambridge," much as the Literary Institute had done in the beginning. The building burned in 1942, and the site remained vacant until 1969. A more complete history of the institute appears in Chapter V.

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Commercial Architecture

Commercial buildings in East Cambridge are relatively modest in comparison with its civic structures. Its population was too small, and downtown Boston too close, for the area to develop a significant business district. Of the commercial buildings along Cambridge Street, only the banks exploited the architectural potential of their sites.

Inns and Hotels

The earliest 19th-century buildings in East Cambridge were commercial establishments — a brewhouse, blacksmith shop, and tavern — erected by the Lechmere Point Corporation and leased to individual operators. As early as 1809, the proprietors arranged to have a tavern built near the junction of Bridge and Gore streets and contracted with Calvin Brooks to run it. By 1811, both Brooks Tavern and Marcy's Hotel at the nearby intersection of Bridge and Cambridge streets (later known as Lechmere Square) provided food, lodging, and other services for those with business at the courthouse and travelers en route to Boston markets. These public houses were the most important ones in early East Cambridge and operated throughout the 19th century. They were highly visible, facing the points of their triangular lots; behind them stood extensive wooden stables. In the 1810s and 1820s, they were often used for public auctions, and the Proprietors of the Lechmere Point Corporation held most of their meetings at Marcy's Hotel, the larger of the two and closer to the bridge. These public houses are probably the two buildings which appear just to the left of the end of Craigie's Bridge in the 1810 view in Figure 29.

320. Lechmere House Hotel, Lechmere Square, 1843? Demolished 1910. Photograph 1907

Architecturally, both inns were domestic in appearance, although they differed in size and material. Brooks, who lived nearby on Gore Street, ran his two-story wooden tavern until his death in 1818, when his wife took over. His probate inventory included a separate listing for the "bar" that contained eleven numbered rooms with beds, a large variety of serving dishes and table cloths, and eight barrels of cider. The tavern remained in the Brooks family until the 1870s. It was run by a variety of innkeepers, and was known in the 1840s and 1850s as Reed's Tavern, and in the 1860s as the Mansion House. No photograph of it is

321. Advertisement for Flanders Exchange, 1863

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known, and it had disappeared by the time Bridge Street was widened in the 1920s.

Marcy's Hotel was a large brick building containing at least fourteen numbered rooms (most with two or more beds) and a separate well-stocked barroom at the time of Marvin Marcy's death in 1835. After a serious fire in 1843, it was rebuilt as the simple but imposing three-story hotel with a deeply recessed center entrance seen in Figure 320. In the 1840s and 1850s, the hotel was known variously as the Lechmere Point Hotel and the Lechmere House; in the 1860s, it was run by Joseph Flanders and called the Flanders Exchange (Fig. 321). After Marcy's death, the hotel was owned for the rest of the century by George Wheatland, and was operated by a series of innkeepers until it was demolished about 1910 by the Boston Elevated Railway. Lechmere Square is now occupied by the Lechmere MBTA station, and the intersection is a confusing maze of traffic lanes passing under the streetcar viaduct rather than the major visual focus and commercial location it was in the 19th century.

322. Lechmere Bank, 18–22 Second Street, 1853, moved in 1895 from 172 Cambridge Street. Demolished c. 1965. Photograph c. 1965

Banks

Since the 1850s, the banks have all been within a few hundred yards of each other on Cambridge Street. East Cambridge has never had more than three banks at any one time and, until recently, the institutions were closely related. Different banks are known to have shared a building, had officers in common, or used the same architect.

The Middlesex Bank was founded in 1832 but closed its doors shortly thereafter. It was known as a "pet bank" because it was established as a depository for government funds after the closing of the Bank of the United States and before the organization of the subtreasury system. Although the bank was honestly managed, it failed along with other banks associated with government surplus revenue during this period. It was another twenty years before East Cambridge could boast its own banking institution.

In the 1850s, two banks were founded in quick succession. The Lechmere Bank, chartered in 1853, occupied a new building on the southwest corner of Cambridge and Second streets (Fig. 322). The following year, the East Cambridge Savings Bank was incorporated and occupied rooms in the Lechmere Bank building.

That two banks existed where there had been none may seem curious, but they served different purposes and different clienteles. The Lechmere Bank was a profit-making commercial institution that made business loans to its customers, while the savings bank was a nonprofit institution that invested its depositors' money in order to pay them interest.

In 1865, the Lechmere Bank was reorganized as the Lechmere National Bank under the National Bank Act of 1864, which created a banking system whereby commercial banks were incorporated under charters granted by the federal government. The idea was to provide a uniform national currency; under the old system, each bank had issued its own notes. Savings banks, on the other hand, were chartered by the commonwealth to encourage thrift among people of modest means.

The Lechmere Bank building was erected in 1853 by Ephraim Buttrick and Lorenzo Marrett, who were also members of the savings bank's first board. This circumstance may explain how the banks came to share the same building, as they did until 1872. In 1866, the Lechmere Bank purchased the structure from Buttrick and Marrett. Of pressed brick trimmed in brownstone, the building set the conservative tone that other East Cambridge banks followed in later decades. The pitch of the roof, the gable treated as a temple pediment, the complete entablature, and window trim were all Greek Revival. The only indication of the ascendant Italianate manner of the 1850s was found in the double windows with round brownstone archivolts supported on cast-iron columns. In addition to the banking space, the building contained a modest hall, which occupied one third of its third floor. The remainder of the upper floors was divided into offices.

In 1895, when Middlesex County acquired the site for the present Registry of Deeds, the bank was moved to the southeast corner of the same intersection and turned so its original Cambridge Street facade faced Second Street. It was demolished in 1964; the site is now occupied by the Shawmut County Bank.

A third institution, the Cambridge National Bank, was organized in 1864 on Cambridge Street near the northeast corner of Third, adjacent to the current BayBank/Middlesex branch. Daniel Sortwell, the bank's president until 1894, was also a trustee of the savings bank.

In 1872, the Lechmere and East Cambridge Savings banks parted company. The savings bank purchased the estate of Dr. Anson Hooker (a former trustee and charter member of the corporation), on Cambridge Street between Second and Third streets, and operated a banking room on the first floor of his former house (see Fig. 162). The building was taken by Middlesex County in 1895, and the bank was forced to find new quarters.

The savings bank acquired its present site at 292 Cambridge Street and erected its first building exclusively for bank use in 1894 (Fig. 323). Neoclassical in style, the bank was constructed of brick and iron and

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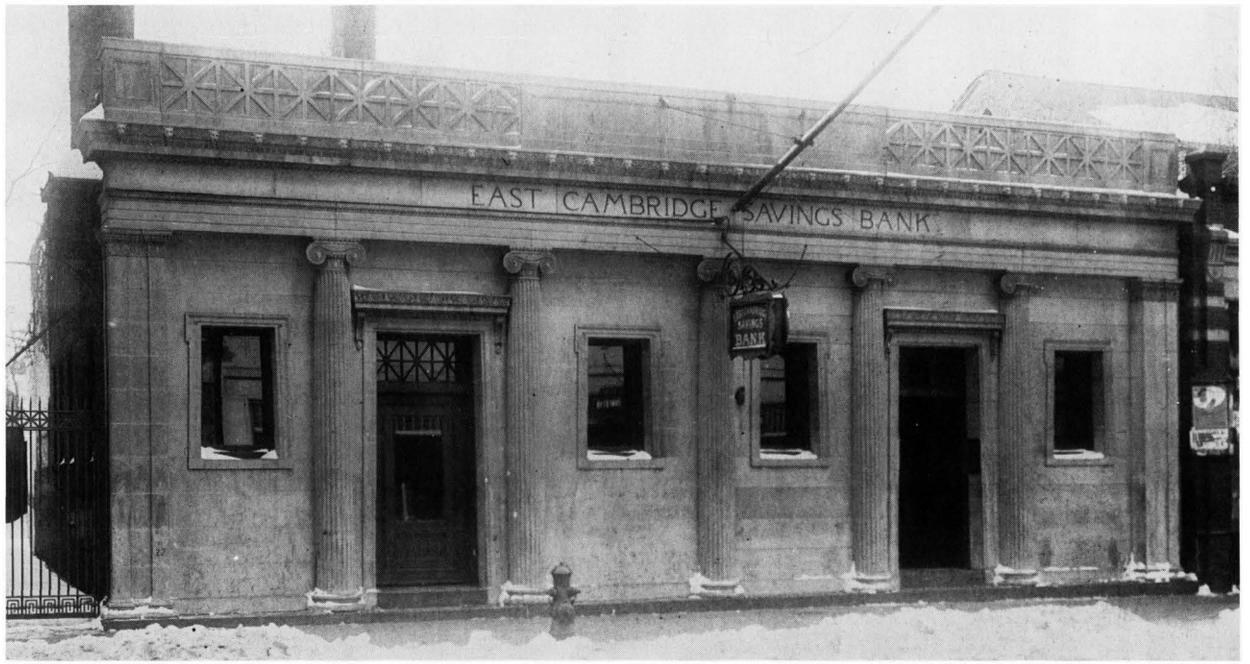

323. East Cambridge Savings Bank, 292 Cambridge Street, 1894, Eugene T. Harrington

324. Lechmere Bank, 225 Cambridge Street, 1917, Thomas M. James. Photograph c. 1967

faced with stone. The facade was one of great decorum — symmetrical, lined with Ionic columns, and finished at the corners with paired pilasters — with the name of the bank etched proudly into the frieze. The whole spoke of solidity, security, and permanence — a little stone temple to savings. The savings bank was getting not only a headquarters but also a piece of advertising.

The Lechmere Bank moved to 337 Cambridge Street in 1895, when its original building was taken by the county, and in 1904 moved to 221 Cambridge Street, the site of the Cambridge National Bank, which had gone out of business that year. In 1917, the bank hired the Boston architect Thomas M. James to design a new building on the adjoining lot at 225 Cambridge Street.

James provided a structure of cast stone in imitation of white limestone, with monumental Doric columns. This Roman temple is the very image of conservative dignity that banks on almost every Main Street sought to emulate in the 1920s (Fig. 324). In 1936, Lechmere merged with the National Bank of Malden and the Everett Bank & Trust to form the Middlesex County National Bank, which in turn evolved into BayBank/Middlesex, which still occupies the building.

Not to be outdone, the East Cambridge Savings Bank hired James in 1931 to design a new headquarters on the site of its 1895 Neoclassical building, diagonally across the street from the Lechmere Bank (Fig. 325). This building was far more original than James' earlier work. A granite cube pierced by arched windows on three sides houses the main banking room. A brick wing, of the same height but divided into two floors, extends from the rear and contains the boardroom and additional work space. The building greatly benefited from James' collaboration with the New York sculptor Paul Fjelde, who designed the elaborate exterior carving as well as the paired bronze doors.

While the carving along the frieze may seem abstract, a close inspection of the leafy swirls and winged dogs reveals figures representing Industry, Commerce, and Agriculture. Flat geometrical figures decorating the bronze doors also portray industrial themes: farming, fishing, spinning, and mining. The care paid to exterior decoration carried over to the interior, with its marble walls and counters, bronze counter screens, floridly carved arches, painted ceiling, Byzantine hanging lamps, and stainless steel vault (Fig. 326).

Stylistically, this bank has been described as somewhere between Italian Romanesque and Byzantine, but it is perhaps more accurate to say that James drew elements from both these styles and from the contemporary Art Deco to create an image of prosperity and security. The project was undertaken at the height of the Depression, and for the savings bank to put up an expensive building in such troubled times was a sign of financial stability. The bank also provided jobs for East Cambridge artisans and won the enduring loyalty of many.

The East Cambridge Savings Bank is one of the area's architectural gems. The 1976 addition by the firm of Charles Hilgenhurst adds to its architectural interest. The designers, Warren Schwartz and Robert Silver, detached the last arched bay on the western facade and rotated it 90 degrees, making it even with

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325. East Cambridge Savings Bank, 292 Cambridge Street, 1931, Thomas M. James. Addition (right), 1976, Charles Hilgenhurst Associates

326. Interior, East Cambridge Savings Bank, looking toward 1976 addition

the Cambridge Street facade of the bank. The bay was then reattached to the old building by a steel-framed glass arcade, whose ribs repeat the curve of the arched windows. The addition is ingenious and respects the architecture of the original.

The only new bank in East Cambridge in recent years is the unprepossessing Shawmut County Bank, at 160 Cambridge Street, designed in 1965 by Symmes, Maini & McKee. While the Shawmut County Bank and BayBank/Middlesex are branches, the East Cambridge Savings Bank retains its neighborhood orientation of a hundred years ago. In an age of regional bank holding companies, it is conscious of its roots to an exceptional degree and is the only bank in East Cambridge that has a sense of the past.

Retail Stores

The earliest business center in East Cambridge was near the western end of the Craigie Bridge — an area that has since been entirely rebuilt. The first documented store stood until 1977 at 26 Gore Street, on the corner of Second (Fig. 327). A store had stood at this location as early as 1829 and was run by John Palmer as a grocery from 1830 on. In 1839, Palmer built a new building and kept his store there until he retired in 1881. Beginning in 1886, the greater part of the building was occupied by Patrick McElroy's glass factory, the last to operate in East Cambridge.

This brick building with foundation, sills, and flush lintels of granite was capped by a roof that was both hip and gable, a solution that results when two ridge roofs meet at right angles. The clear geometric quality of the Late Georgian design and the crisp cornice of diagonally set bricks are typical of East Cambridge vernacular buildings of the 1830s. The interior did not have the living quarters that were generally provided on a store's upper levels and that were suggested by the fenestration. The second floor served as a storage area, except for a corner office, and the walls were left unplastered. An interior hoist was just inside the door at the west end of the facade. The entire third floor contained a meeting hall.

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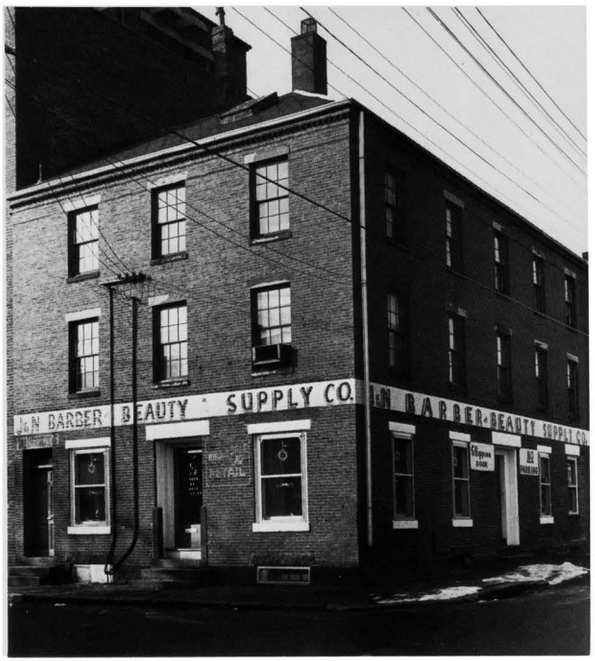
The next generation of stores took advantage of the larger sheets of glass then becoming available, and employed display windows under granite lintels supported by iron piers. Reed's Hall at 161 Bridge Street (c. 1840) combined stores on the ground floor, probably apartments on the second, and a hall on the third (Fig. 328). In other respects, this building was very similar to residential buildings of the period (see Figs. 161–162).

By 1850, Cambridge Street had established itself as the retail center of East Cambridge, and a more complete picture of store architecture emerges. The majority of businesses listed in the 1851 Cambridge directory were still tradesmen and professionals — blacksmiths, carpenters, counselors — but there was a small core of retail stores between Second and Fourth streets. The stores included two bakers, four provision dealers, a bookstore, an apothecary, a dry goods store, and two shops selling crockery and glassware. None of the storefronts survives in its midcentury condition. West of Fourth Street, Cambridge Street remained predominantly residential, with freestanding houses such as 369–371 Cambridge Street (1825) and 379–381 Cambridge Street (1836), rather than the combined stores and living quarters that characterized the retail area.

Store architecture at this time generally followed the same side-hall plan that dominated domestic architecture in East Cambridge (Fig. 329). An entrance on one side leads to a relatively narrow stair hall and thence to the living quarters above; the store takes up the rest of the ground floor. Essentially, the store occupies the space ordinarily reserved for double parlors in residential buildings of the period. Larger buildings generally follow the scheme of double houses or row houses. At 82–84 Cambridge Street (c. 1850) (Fig.



327. 26 Gore Street, 1839, demolished 1977. Photograph 1967

328. Reed's Hall, 161 Bridge Street, c. 1840. Demolished c. 1925. Photograph 1904

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329. 580 Cambridge Street, c. 1870. Photograph 1933

330. Buck's Hall, 82–84 Cambridge Street, c. 1850. Photograph 1904

330; demolished) and 519–525 Cambridge Street (1875), two entrances with their separate halls and stairs are placed together in the center of the composition, with stores at either side.

By 1857, retail stores made up two thirds of all the businesses on Cambridge Street. This proportion of retail to other businesses continued through 1873, although the actual number of firms almost tripled. As the number of stores increased, the retail business area grew west to Ninth Street, and many new shops opened between Fifth and Eighth streets.

Some of them occupied new commercial buildings that no longer reflected the earlier domestic patterns. A good example is the three-story brick block at 305 Cambridge Street (1876), which replaced a frame store (Fig. 331). Inset tiles and fancy brick panels and cornice enliven the second and third floors of the symmetrical facade. The wide center arched windows and the deep cornice are commercial rather than domestic in scale. The exact configuration of the first floor is unknown, but there was probably one retail store and a door to the side leading to the upper floors.

Storefronts were also added to houses as the demand for space increased. Remaining examples include 425 Cambridge Street (see Fig. 340) and the 1871 storefronts added to 457–459 Cambridge Street (1848–49) so that the proprietors of a confectioner's and a shoe store could live above their businesses.

The 1870s also provide several examples of well-preserved storefronts along Cambridge Street. One of the best is 538–540 Cambridge Street, built in 1875–76 for Joseph Metzger, a watch crystal maker who originally established a restaurant in his new building and lived upstairs (Fig. 332). The symmetrical exterior of the building frankly expresses its dual use. Finely detailed identical recessed entrances flank the plate glass show window and give access to the commercial and living quarters, while a second-story bay window emphasizes the commercial space below. The scale of the show window seems domestic because the limited size of glass panes required the use of numerous dividing bars. This original ground floor with its wooden trim provides a valuable view of Cambridge Street's 19th-century character, which is all too rapidly disappearing.

The 1880s witnessed a burst of commercial building along Cambridge Street; some was new construction, some a remodeling of earlier structures. On June 30, 1883, the *Cambridge Chronicle* reported that "rebuilding, along Cambridge Street especially, is quite an important feature of East Cambridge business just at present." As Cambridge Street and particularly the area west of Fifth Street became more and more developed, it became usual to move houses to make room for larger commercial structures. In 1883, Joseph Wyzanski moved his dwelling from 403 Cambridge Street to 318 Hurley Street (see Fig. 202) in order to erect a three-story brick structure, which he used as a dry goods store (Fig. 333). This excellent Queen Anne building, with its corbeled brick cornice, segmental

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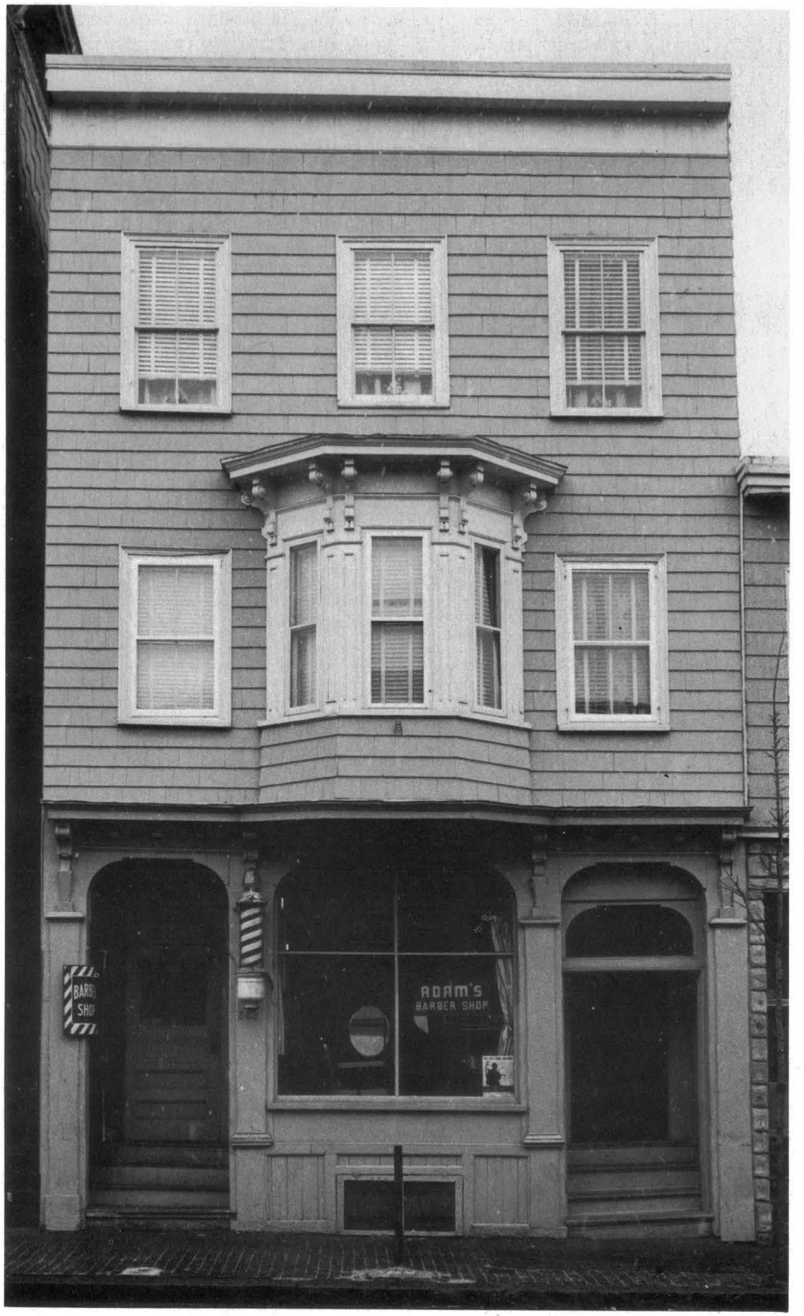
331. 305 Cambridge Street, 1877. Photograph 1964



332. 538–540 Cambridge Street, 1875–76. Photograph 1964

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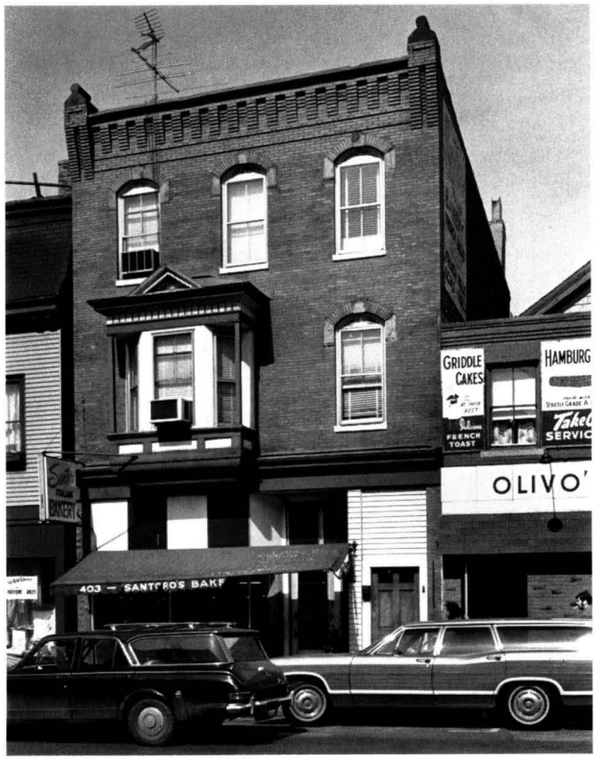


333. 403 Cambridge Street, 1883. Photograph 1964

334. 187–191 and 201–203 Cambridge Street, 1889, E. K. & W. E. Blaikie. Photograph 1970

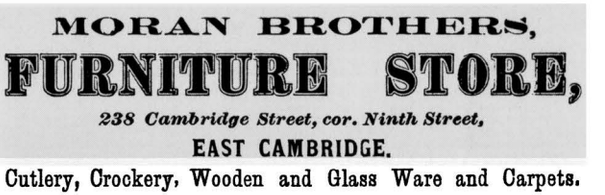
arched windows, and second-floor oriel window, was much more elaborate than most of its neighbors. Unfortunately, the ground-floor store space has been remodeled, but the building as a whole is one of the finest commercial structures remaining in East Cambridge.

Similarly, in 1889 James Ferguson moved several wooden buildings on Cambridge Street and hired E. K. and W. E. Blaikie of Boston to design two Queen Anne brick blocks with rough stone trim at 187–191 and 201–203 (demolished) Cambridge Street (Fig. 334). With stores on the ground floor and apartments above, these four-story blocks accommodated nine families in large, five-room suites. Behind his substantial brick blocks, Ferguson built a large four-story wooden structure with no direct access to the street to house another twelve families.

Houses were also moved in the 1880s to the rear of lots to create new commercial frontage. In 1885, the 1824–25 double house at 467 Cambridge Street (see Fig. 143) was moved to the back of the lot and a large, three-story store, with plate glass windows and slender cast-iron columns (now removed), was built in its place at 469–471 Cambridge Street. The first floor of the new building was occupied by the George R. Brine & Company clothing firm and George Towne's kitchen equipment store, both of which benefited from the large display space.

The increase in business activity encouraged ever more effective use of prime retail space, sometimes resulting in the demolition of earlier buildings. The owner of a building on the northwest corner of Cambridge and Third streets stated in the *Chronicle* in 1888 that "it would be cheaper to commence from the foundation and build new rather than remodel or repair." He soon replaced the pre-1854 building there with a new grocery store with tenements above, and other owners along Cambridge Street followed suit.

As the volume of business and the need for larger areas of uninterrupted space increased, store plans were modified to create more display area. A corner building at 566 Cambridge Street placed the residential stairway on Seventh Street, thus allowing the full 50-foot Cambridge Street frontage to be used for commercial purposes. Similarly, the entrance stairs to 610–622 Cambridge Street were pushed to one end of the


MORAN BROTHERS,
FURNITURE STORE,
238 Cambridge Street, cor. Ninth Street,
EAST CAMBRIDGE.
Cutlery, Crockery, Wooden and Glass Ware and Carpets.

335. Advertisement for Moran Brothers, 1874

90-foot building to provide almost uninterrupted store frontage (Figs. 335–336). This arrangement created interior problems, however, because a long lateral hall on the second floor was necessary to reach the apartments along the front and back of the building.

In spite of the increase in commercial building and remodeling in the 1880s, the Cambridge Street business district remained fairly stable. Half the retail stores that existed in 1851 were still there in 1857. After 1873, many moved west on Cambridge Street. Ten shops that existed in 1857 were still operating in 1873, although mostly in new locations or in expanded form. By 1886, many of the early commercial property owners had purchased additional parcels to expand on Cambridge Street. Smaller retail areas also developed along Hurley and Charles streets beginning in the 1870s, but they never achieved the coherence of Cambridge Street (Fig. 337).

Two examples of the stability of Cambridge Street as a commercial thoroughfare are 414 and 425 Cambridge Street, which lie diagonally across the intersection of Fifth Street. The building at 414 Cambridge Street (1860) until recently preserved its early storefront (Fig. 338). The Blake family owned the building and operated a grocery store from 1864 through 1916 (Fig. 339). The building retained its identity as a grocery store at least until 1946, when a First National Store occupied the space. Similarly, 425 Cambridge Street (1824–25) has a long history of single ownership and use (Fig. 340). In 1867, the physician E. H. Weston purchased the house and, like many other businessmen at that time, added a storefront sometime before 1873. At first, Weston used the property as his office and living quarters, but in 1873 he moved his apothecary business into the storefront. An additional storefront

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336. 610–622 Cambridge Street, 1869, H. B. Dennison. Photograph 1969

338. 414 Cambridge Street, 1860. Photograph 1969

EDWIN H. BLAKE,

DEALER IN

Choice Family Groceries,

FOREIGN & DOMESTIC GOODS,

JELLIES, Etc.,

CORNER OF CAMBRIDGE AND FIFTH STREETS,

EAST CAMBRIDGE.

Goods delivered to any part of the City Free of expense.

339. Advertisement for Edwin H. Blake, 1865

337. 232–236 Hurley Street, 1872–73. Photograph 1965

340. 425 Cambridge Street, 1824–25. Photograph 1969

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341. Cambridge Street looking east from Fifth, 1943

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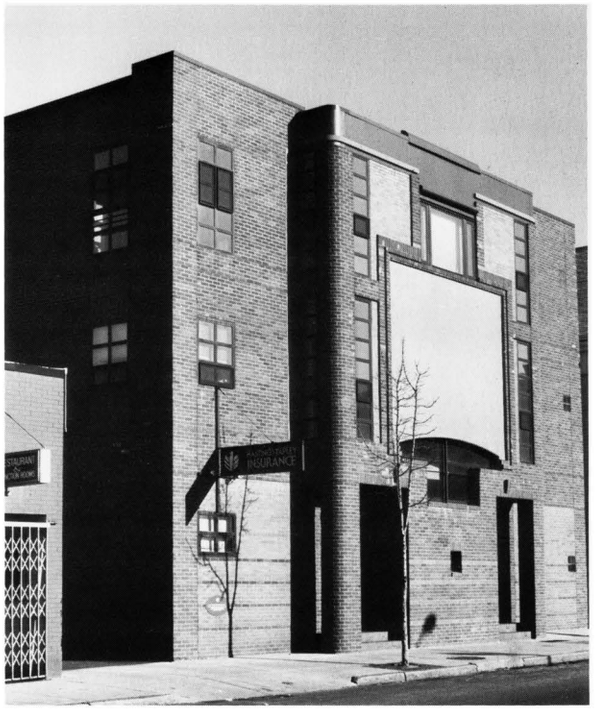
342. East Cambridge Garage, 665 Cambridge Street, 1927, S. S. Ersulag. Demolished 1974. Photograph 1969



343. Hastings-Tapley Insurance Company, 271 Cambridge Street, 1983, Koetter Kim & Associates

was added by 1893. The property has changed hands many times, but it remains in use as an apothecary.

By the turn of the century, Cambridge Street was filled with a mixture of stores, storefronts, tenements, and houses (Fig. 341). In the 1920s, some new buildings appeared, generally toward the western end of East Cambridge. Some of them had two stories, such as 648 Cambridge Street, and a few were one-story blocks, such as 657 Cambridge Street, which featured the cast stone trim that became popular throughout the city at that time. The most interesting commercial building of the decade was a fireproof garage at 665 Cambridge Street (1927) designed by S. S. Ersulag; it was demolished in 1974 by the Cambridge Housing Authority (Fig. 342).

At least two recent brick buildings were so undistinguished that they have been thoroughly redesigned and expanded by other architects in the 1980s to increase their interest. In 1983, the one-story Hastings-Tapley insurance office (1969) at 271 Cambridge Street was completely transformed into a three-story office building (Fig. 343). Fred Koetter's Postmodern design, with its glass blocks, rounded brick corners, and large blank stucco panel in the center, fits somewhat uneasily into the streetscape but has given the street its most unusual commercial facade. It is to be expanded by the same architect in 1989.

More recent is the remodeling and expansion of a two-story restaurant and office building at 501 Cambridge Street (1976). In 1986, the architectural firm of Hammer, Kiefer & Todd added a new third floor for its offices. The architects retained the yellow brick but changed the fenestration and introduced red brick accents and a pediment on the Cambridge Street side.

Today, Cambridge Street remains the commercial spine of East Cambridge and serves a neighborhood clientele with banks, bakeries, and ethnic groceries instead of the up-to-the-minute specialty stores that have invaded so many commercial areas of the city. Relatively little new construction has taken place in recent years, although a number of 19th-century buildings have been thoroughly remodeled, particularly on the ground floor. The most striking changes have resulted from the demolition of older buildings since the late 1960s, creating parking lots that disfigure the streetscape, especially at the corners of Cambridge and Third, Fourth, and Sixth streets. Gentrification and the construction of the Galleria mall will have unforeseeable consequences for the Cambridge Street business district.

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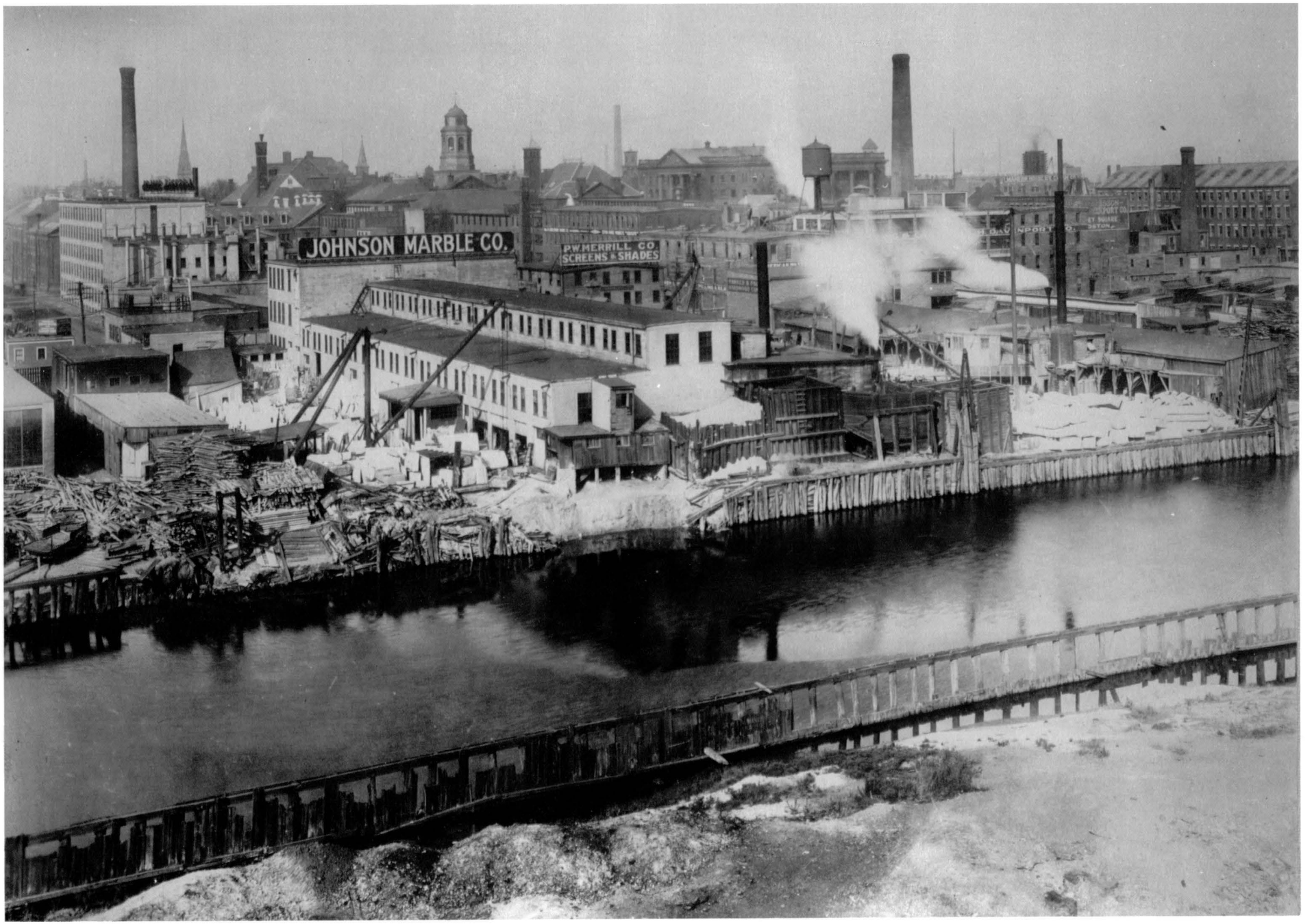

344. Lechmere Canal, 1920. Background, from left to right: H. M. Sawyer & Son; Middlesex County Courthouse; Registry of Deeds; Irving & Casson–A. H. Davenport Company

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IV

Industrial Development and Architecture

East Cambridge was the first part of Cambridge to attract industry and until the 1880s was unrivaled as the industrial center of the city. Most of its early enterprises needed access to transportation and cheap waterfront land, both of which were available in abundance. The Charles and Miller's rivers, although tidal, accommodated coastal shipping, while the turnpikes, the Middlesex Canal, and the railroads gave unparalleled access to the interior. Boston, a short walk across the Canal Bridge, provided both a market and a labor force. In East Cambridge the stage was set for Cambridge to become, as it did by 1920, an industrial city second only to Worcester in Massachusetts.

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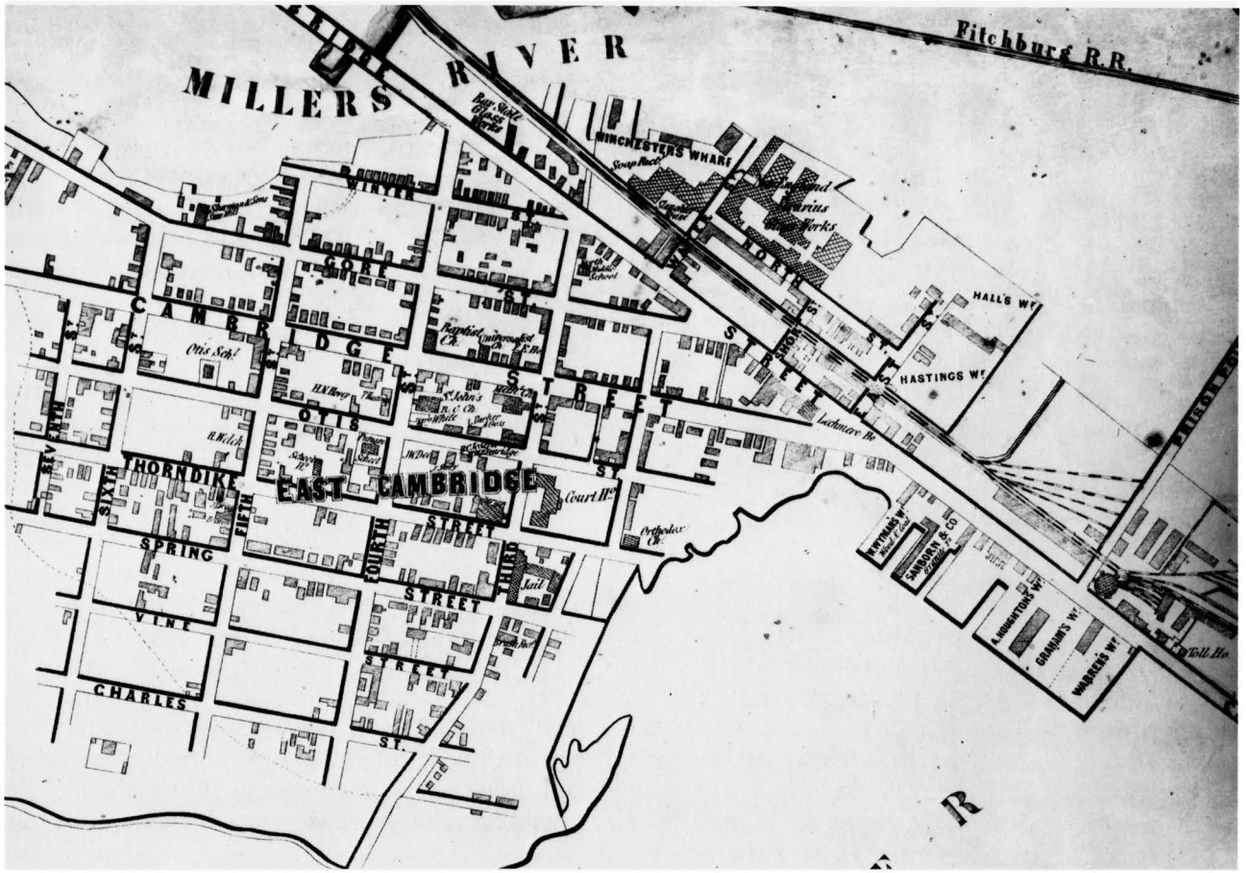
Early Industry, 1814–54

Lechmere Point, in Cambridge, near Boston, now [1823] contained a population of more than one thousand. Its recent and rapid growth was principally ascribed to its manufacturing and provision establishments. In the glass house, cutting house, and other appendages to the manufactory, one hundred and forty workmen were constantly employed. There were manufactured there 22,400 lbs. of glass vessels per week, many of which were beautifully cut and sent into Boston, and to various other places for sale. The annual amount of sales was $150,000. Besides an immense amount of provisions packed in the place, and large manufactories of candles and soap, there were at the Point an extensive pottery, a brewery, and two large carriage manufactories, and one hundred and fifty men were employed in the vicinity in making Bricks from an inexhaustible bed of clay.

Abiel Holmes, *The Annals of America,* 1829, vol. II, p. 503



345. East Cambridge in 1852

Industry was drawn to East Cambridge in the first half of the 19th century primarily by cheap land, access to water transportation, and proximity to Boston. As soon as the Canal Bridge was completed in 1809, Bridge, Gore, and Cambridge streets became major arteries from Medford and Old Cambridge as well as from other towns throughout Middlesex County, southwestern New Hampshire, and Vermont. The area north of Bridge Street was especially desirable, as the Miller's River Basin was the terminus of the Middlesex Canal and was separated from Boston Harbor only by the Prison Point Bridge. The area south of the bridge, along the Charles River, also developed quite early, although the Canal Bridge was an inconvenience to shipping.

In September 1813, the Lechmere Point Corporation made its first sale of land for industrial purposes. Within a few months, the Boston Porcelain & Glass Company was producing flint glass on a large tract on the Miller's River. Although it survived only three years, the glassworks was East Cambridge's first factory and launched its most prominent 19th-century industry. Between 1814 and 1849, seven glass companies were established in East Cambridge. Some lasted only a few years; others spanned most of the century. All together, they made the area a glass manufacturing center of national importance.

By 1814, the Lechmere Point Corporation had built two boardinghouses, no doubt for workers at the glassworks and the courthouse at a time when there were few accommodations nearby. Other enterprises soon followed. In 1818, the New England Glass Company acquired the factory of the bankrupt Boston Porcelain & Glass Company and immediately began to operate it successfully. In 1819, Edmund and Amasa Winchester established a soap factory across Water Street from the glassworks.

The early industries settled on the periphery of East

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Cambridge, close to water transportation. Most of them wanted to be north of Bridge Street because of easier access to the harbor, but a few chose Third Street, south of the courthouse and jail, among them the New England Glass Bottle Company and Stratton, Sherriff & Company, brush manufacturers. These areas were isolated from residential and commercial development as well as removed from the bridge traffic, although Third Street later became a link to Cambridgeport and the West Boston Bridge. Until 1858 the Canal Bridge required a toll, something that had to be considered in siting a factory. While some early owners such as the Winchesters were allowed free passage over the bridge, the privilege applied only to them personally, not to any loaded wagons or carts connected with their business. The importance of water transportation and the value of waterfront property for industries during this period is therefore quite clear.

South of Charles Street, the only factory was a pyrotechnics laboratory, which produced fireworks on an isolated island in the marshes. The rest of the area south of Charles and west of Second and Third streets was developed only after the Civil War, when filling produced buildable land away from residential areas on the upland.

A few firms settled along Gore Street in the early 1800s, but they were generally small woodworking shops or individual craftsmen: cabinetmakers, organ builders, ladder makers, and a sawmill. As these businesses increased in size, they either consolidated along Gore Street or moved to the newly filled land south of Charles Street.

The 1830s brought many changes. In 1832, the flats north of the Canal Bridge were sold to the Boston & Lowell Railroad, which filled in a dock at the west end of the bridge for its terminal. At the same time, the west 100 feet of the Canal Bridge were filled in by agreement with the railroad. In 1834, the Canal Bridge Corporation sold 300 feet of flats along the causeway for development into wharves. At least five firms, including wood and coal yards, lumberyards, and a granite yard, had their own docks here by 1852.

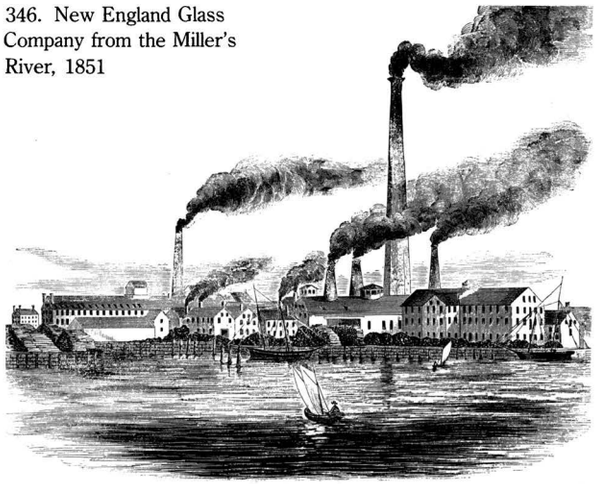
By midcentury, East Cambridge was a thriving industrial community, the home of three of the five major companies described in the 1849 directory. Stratton, Sherriff & Company employed about 150 people making brushes. The New England Glass Company (discussed at length in the next section), was the largest flint glass factory in New England and employed more than 200 hands. E. & A. Winchester had become the city's largest soap manufacturer, with six steam boilers and a capacity of 42,000 gallons. It also produced candles and boxes, employing 50 persons in these operations alone. It was the only soap factory in East Cambridge; Cambridgeport, with eleven soap companies by 1847, became the center of soap making in the region. These three industries alone — brushes, glass, and soap — together accounted for more than 500 employees, or almost 50 percent of all the employed adult residents of East Cambridge listed in the 1849 directory.

The 1852 McIntyre map shows the area north of Bridge Street as a dense concentration of factories, workers' housing, wharves, and railroad tracks (Fig. 345). Wharves fully occupied the south side of the bridge as well. While there were a few factories along South Third Street and Gore Street west of Fifth, the major concentrations were north of Bridge Street and near the bridgehead. In the second half of the century, new industrial clusters developed, mostly on filled marshland between Charles Street and the Broad Canal, but also along the Charles River, which underwent extensive filling in the 1890s.

Glassmaking

By far the most important early industry in East Cambridge was glassmaking, which by 1845 was the largest employer in the city. At its peak, the New England Glass Company employed more than 500 people (Fig. 346). Next in prominence, although considerably smaller, was the Bay State Glass Company. These two companies produced a diverse line of high-quality cut and engraved flint glass, ruby glass, and molded and pressed glass, as well as lamps and scientific instruments, all of which found ready markets. Factories for producing window glass (New England Crown Glass Company) and bottles (New England Glass Bottle Company) also settled in East Cambridge in the early 19th century but ceased operations before 1850. After the Civil War, glassmaking gradually shifted to the Midwest, where cheaper fuel and labor allowed larger, more mechanized glassworks to undercut prices at the eastern factories and eventually force them out of business.

346. New England Glass Company from the Miller's River, 1851



The Boston Porcelain & Glass Company

Encouraged by the success of a small flint glass factory in South Boston, three Boston men, Jesse Putnam, Thomas Curtis, and George Blake, incorporated the Boston Porcelain & Glass Company in 1814 to manufacture flint glass. The proprietors chose a site on the Miller's River bounded by North, Water, and East streets, which Jesse Putnam had purchased from the Lechmere Point Corporation in 1813. The small six-pot furnace they constructed was Cambridge's first industrial venture. However, the directors evidently lacked the practical skill and business acumen to make it profitable, and in 1815 the works were leased to three glassblowers from South Boston. In early 1817, the factory suffered an extensive fire, and later that

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NEW-ENGLAND
GLASS COMPANY.

THE NEW-ENGLAND GLASS COMPANY, inform the public, that their Manufactory at *Lechmere Point*, near Boston, is now in full operation; that they have employed the best of workmen, and they can now execute any orders, with the greatest despatch.

They have now on hand, at the Manufactory, a complete assortment of FLINT GLASS, of superior quality,

—CONSISTING OF—

Apothecary and Chimical Wares,	Globes, of all sizes and kinds,
Electrical Apparatus,	Decanters—Tumblers,
Entry Lamps,	Wines,
Moonlight Lamps,	Dishes—Plates—Salts,
Convex Clock Faces,	&c.
Vase & Candle Shades,	

Attached to their Manufactory they have an Establishment for *Cutting Glass*, in all its variety, operated by Steam Power, and conducted by experienced European Glass Cutters, of the first character for workmanship in their profession.

☞Any article made or cut to pattern, or particular direction, at the shortest notice.

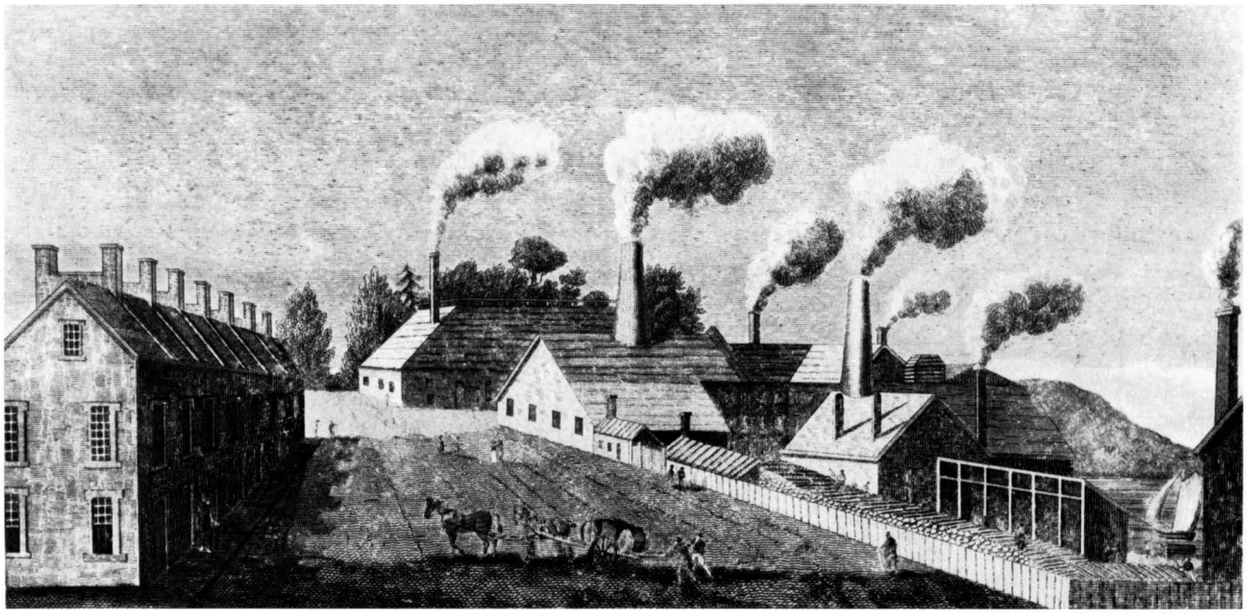
A share of public patronage, is respectfully solicited.

☞Orders addressed to the Agent, by mail, or left at Henshaw & Jarvis', No. 20, Broad-st. and N. Hastings & Co. No. 31, Marlboro'-street, will be gratefully acknowledged, and meet with prompt attention.

In behalf of the Company.
DEMING JARVIS, *Agent.*

WANTED—Several GLASS BLOWERS and CUTTERS, to whom liberal wages will be paid
Boston, April 15, 1818.

347. Advertisement for New England Glass Company, 1818



348. New England Glass Company, c. 1818–27

year the directors decided to abandon operations and put the entire plant up for auction.

The New England Glass Company

In November 1817, the land and factory of the Boston Porcelain & Glass Company, including all its tools, equipment, and raw materials, were sold to Amos Binney, who was later a director of the Lechmere Point Corporation and one of the most active speculators in East Cambridge property. On February 16, 1818, Binney joined Edmund Munroe, Daniel Hastings, and Deming Jarves as incorporators of the New England Glass Company, to manufacture flint and crown glass. Hastings was a Boston merchant who, by 1816, had become a proprietor of the Lechmere Point Corporation. Munroe and Jarves had been involved in the earlier glass factory, and the latter was soon appointed the company's agent.

The New England Glass Company purchased the Porcelain & Glass Company site from Binney and began operations with the existing six-pot furnace. Within two months, the new company was advertising in the Boston newspapers that it was in full operation and looking for glassblowers and glasscutters to "whom liberal wages will be paid" (Fig. 347). Even at this early date, the company hired skilled European glasscutters and was beginning to specialize in fine-quality cut glass, following European examples. The cutting machines were run by a steam engine, a very early use of that technology. During its first year of operation, the company erected a second, larger glass furnace, employed approximately 40 workers, and produced glass valued at $40,000. In the first few years the company burned wood, but in 1820 it converted to bituminous coal, although it was in some ways more difficult to use.

In 1818, the directors authorized building an oven to manufacture red lead, a key ingredient in making flint glass. The first red lead oven in the country, it gave the company a substantial advantage over other domestic glassworks, which had to rely on imported material, the supply of which was often uncertain. De-

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signed by an English engineer, James Barnes, the furnace was so well constructed that it continued in operation as long as the company itself. At the beginning, up to two tons of red lead were produced each week, more than enough to supply the needs of the company. The surplus was sold to other glass companies, and red lead soon became a major product of the firm.

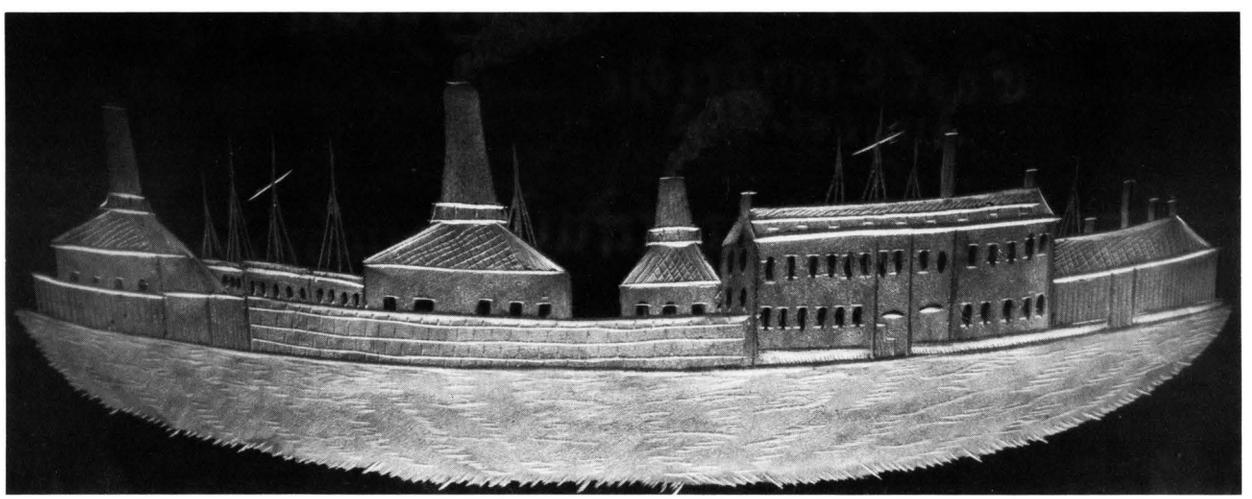
The U.S. Census of 1820 listed the New England Glass Company as employing 80 men and 17 boys and girls and producing "fine, plain, mould and rich cut" glass valued at $65,000 per year. Deming Jarves, who wrote the 1820 census report, indicated that demand had recently increased for the company's common goods, but that the glass articles that required the most work (and that had gained the most favorable critical attention) were declining in sales. This position was slowly reversed so that by midcentury the company was best known for its cut and engraved glass, much of which was colored and which rivaled Bohemian glass in quality and design.

The 1820s were nevertheless a time of expansion, when the company established itself in the industry. By 1823, employment had risen to approximately 140 and annual production reached $150,000 in value. The original Porcelain & Glass Company furnace was replaced by a new one, and with two furnaces constantly in use New England Glass became one of the most extensive flint glassworks in the United States. Its cut glassware was now said to equal the best foreign glass and received "Honorary Mentions" at the annual exhibitions of American manufactured goods at the Franklin Institute in Philadelphia.

The earliest known view of the New England Glass Company factory appears on an invoice dated 1828 (Fig. 348). The lack of detailed maps or descriptions of the glassworks in this period makes it difficult to verify the accuracy of this engraving, but the artist, Benjamin Curtis, worked in Boston from 1818 to 1827. The scene shows several squat buildings with high hip or gable roofs and two massive conical chimneys representing the two furnaces. The long two-story brick building on the left is probably the cutting room along North Street; this building, although much enlarged, survived in the same use until the factory closed in 1888 (see Fig. 360).

In 1825, Deming Jarves left to found the rival Boston & Sandwich Glass Company. His position in the firm was filled by an experienced English glassmaker, Thomas H. Leighton, who came to the United States in 1826 and served as superintendent until his death in 1849. Leighton, a gifted manager as well as an excellent chemist and craftsman, was able to guide the company through a steady expansion to maintain its prominent position in American glassmaking. He also made a heavy personal investment in the company and in East Cambridge. He lived near the factory at 22 Winter Street (see Figs. 182–184) with his wife and eleven children, brought most of his sons into the business as glassworkers (and two as superintendents), and adopted an infant born in East Cambridge as his son.

An 1832 report on glassmaking in Massachusetts listed six furnaces in the Boston area with a total of thirty-eight pots for the manufacture of flint glass. The New England Glass Company accounted for two of the furnaces, with at least eighteen pots, and employed approximately 150 workers at $1.33 per day and 30 boys at 50 cents a day. Annual production had reached $200,000 in value, of which a third was sold in Massachusetts, a third in Connecticut, New York, Pennsylvania, and Maryland, and a tenth in Europe and the West Indies.



349. Scene on goblet showing New England Glass Company from North Street

350. Goblet presented to Thomas Leighton in 1843

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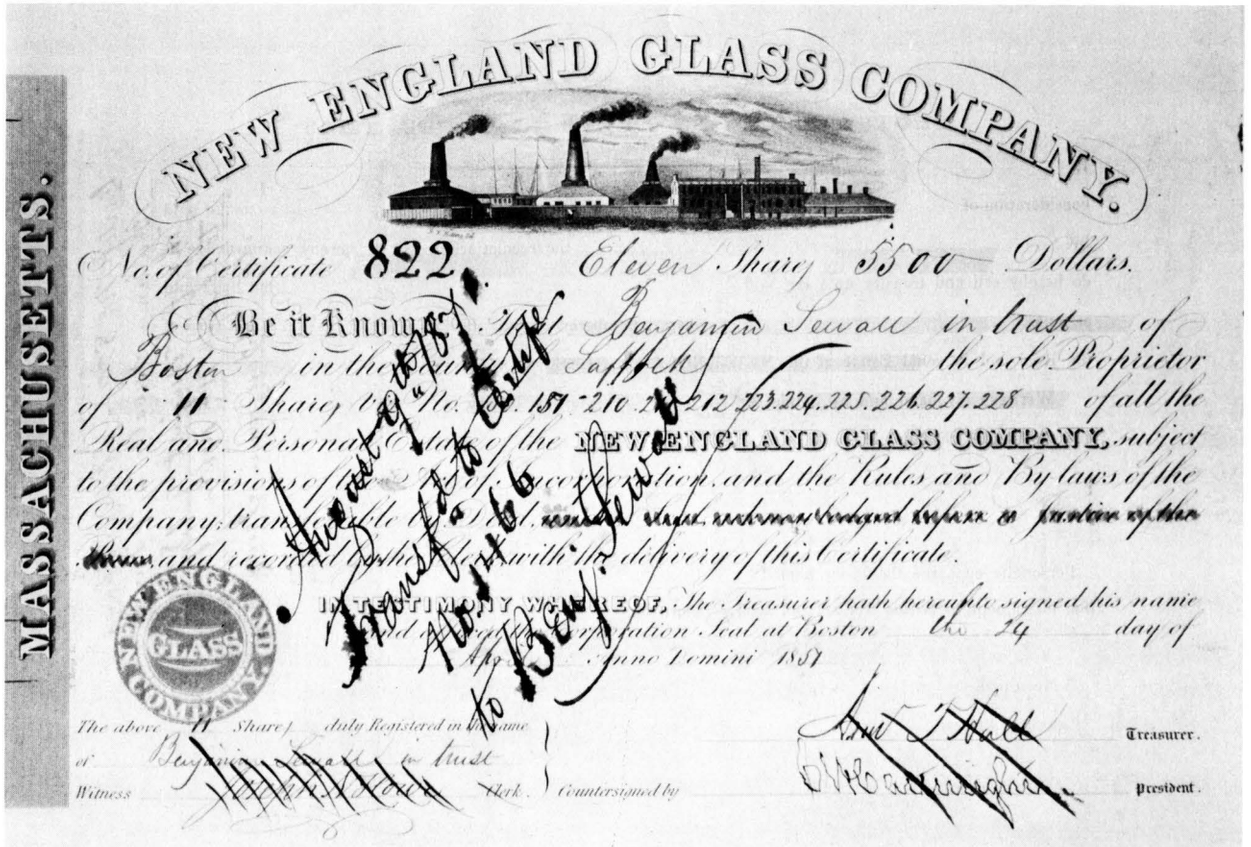
MASSACHUSETTS.
NEW ENGLAND GLASS COMPANY.
No. of Certificate 822
Eleven Shares $500 Dollars.
Be it Known
Benjamin Sewall in trust of
Boston in the
Suffolk
the sole Proprietor
of 11 Shares
of all the
Real and Personal Estate of the NEW ENGLAND GLASS COMPANY, subject
to the provisions of the
and the Rules and By laws of the
Company, transferable
and issued herewith the delivery of this Certificate.
IN TESTIMONY WHEREOF, the Treasurer hath hereunto signed his name
and caused the corporation Seal at Boston the 24 day of
June Domini 1851
NEW ENGLAND GLASS COMPANY
The above 11 Shares duly Registered in the name
of Benjamin Sewall in trust
Witness
Clerk
Countersigned by
Treasurer.
President.

351. New England Glass Company stock certificate

In 1837, the company won a gold medal for its cut and pressed glass at an exhibition at the Massachusetts Charitable Mechanics Association. Although glass from this period is difficult to attribute to a specific maker, a dated vase produced at New England Glass for presentation to Thomas Leighton in 1843 gives both a good example of the quality of the company's products and an early view of the glassworks (Figs. 349-350). Seen from North Street, the factory included a long, brick two-story cutting building which appeared on the 1820s billhead view, although by the 1840s it had been significantly enlarged. The two largest conical chimneys marked the glass furnaces; the smaller chimney served the lead furnace. The same view appears on stock certificates issued by the company at least through midcentury and is the last known view of the factory before the construction of the central chimney in 1850 (Fig. 351). At this time, the company had more than 200 employees and three furnaces constantly in blast.

The 1850s was the heyday of the New England Glass Company. It is also the decade about which the most is known through descriptions and engravings. In 1850, the company constructed an enormous central chimney, 36 feet in diameter at the base and rising 230 feet, the tallest structure in the Boston area (Fig. 352). Its completion was marked by great fanfare, including trips for the public to the top of the chimney in a car hoisted by a steam engine and an impressive fireworks display from the top — most likely using products of the pyrotechnics factory in the marsh south of Charles Street.

The chimney was the focus of a reorganization that reduced fuel consumption, made factory operations cleaner, and increased productivity. The individual stacks over each furnace were removed, and all the furnaces were connected by underground brick flues to the tall central chimney. This system produced sufficient draft to burn bituminous coal efficiently and released smoke and fumes high enough into the atmosphere to avoid polluting the neighborhood. The elimination of the "dense clouds of smoke" that, the *Cambridge Chronicle* reported, had "infested the atmosphere of the Third Ward" for many years was reason enough to celebrate the chimney's completion. In addition, the reorganization reduced the contamination of molten glass, as coal was now shoveled into the furnaces on the floor below (Fig. 353) rather than on the furnace floor, where the pots of glass were melting and the blowers were working.

The great chimney also allowed a more industrial scale of operation. As late as 1879, the average glass factory in the United States employed only 173 workers. But the New England Glass Company had nearly twice this many in 1850, and this led the management to seek greater efficiency. Except for glass pressing, which the company helped to introduce in the United States, there were no major technological advances to simplify the production of fine glassware. Thus greater efficiency had to come from the reorganization of traditional procedures. The physical separation of furnace-tending from glassworking accomplished this by increasing the productivity of the blowers and pressers, whose work was no longer interrupted by laborers moving coal and ash or tending fires.

Other additions in 1850 included a 63-foot-square glass house with one furnace containing twelve pots, bringing the total number of furnaces to four, with forty pots continually in use. A three-story brick building was put up on the water side of the factory, to be used

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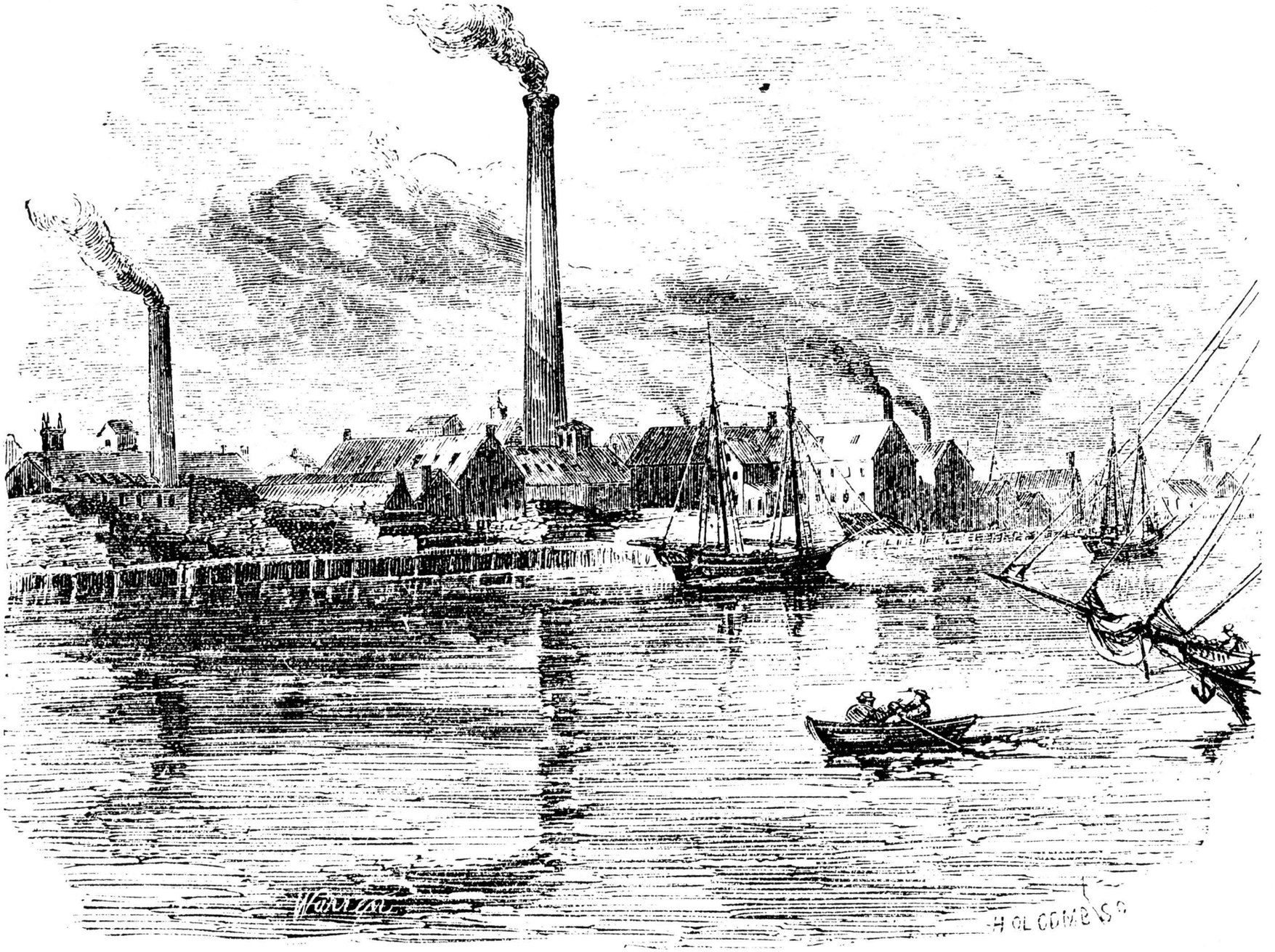

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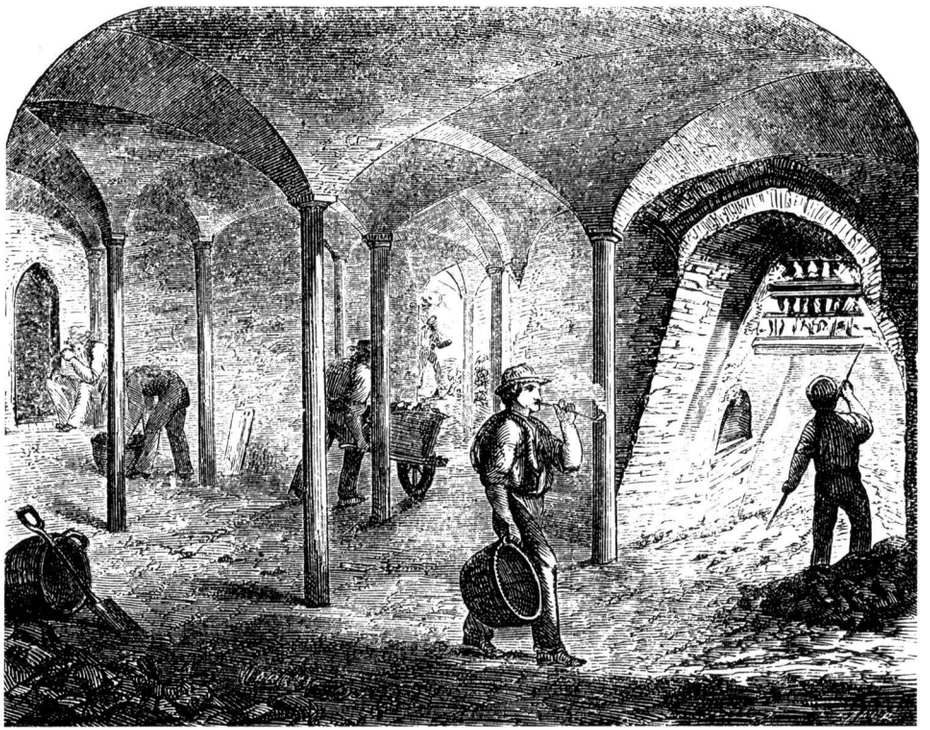
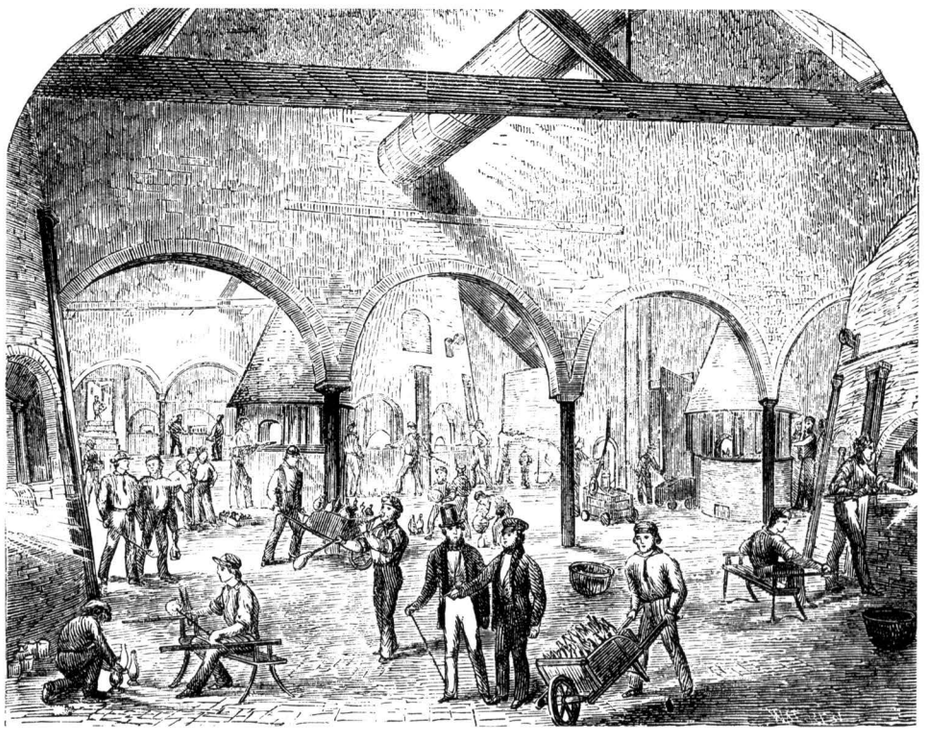


353. "Teazing the fires," New England Glass Company, 1855



354. "The glass-blowing department," New England Glass Company, 1855

as a laboratory for mixing and testing glass ingredients, as well as a blacksmith shop and a machine shop. The packing and warerooms facing Water Street were also enlarged. By this date, all the buildings were substantially constructed of brick, but most were quite plain.

In 1855, about 300 men and boys worked in the main building, which housed the furnaces, annealing ovens (called lehrs), and kilns. It was the heart of the works and the site of intense activity. Blowers, molders, and pressers all worked on the floor surrounded by helpers and apprentices (Fig. 354). The glass was often worked in teams consisting, for blown glass, of one or two blowers and up to three helpers. The size of the teams depended on the complexity of the article blown. Some pieces required two blowers to work the glass simultaneously, passing it back and forth on the ends of blowpipes and gathering rods.

Furnaces ran day and night, as the fires had to be kept at a constant temperature to melt the glass, and when they were shut down, it took several weeks to build the fires up to a steady high temperature. The fires under each pot were built up gradually under the new system. The initial heat was controlled by covering the iron grate of the furnace below the pots with clay or sand "to prevent the fires from burning too furiously" (Gaffield Collection). As the fires gained depth and the pots began to heat, the dampers were gradually removed and the towering new chimney was allowed to pull the full heat across the melting glass. The underground flue system seems to have been unique to New England Glass at this time, as all the other local glass factories continued the English model of separate stacks for each furnace.

Despite the cleaner conditions after 1850, work on the furnace floor was still hot, dirty, and dangerous:

*A dozen or more large furnaces were blazing and smoking; men and boys running here and there with bits of incandescent glass on the ends of blowing irons; workmen seated at benches rolling and forming familiar shapes out of the pliable metal, blowing lantern bodies, pressing other shapes at a single stroke of the die, making goblets, sauce-dishes, butter-trays, finger bowls and decanters; the effect of the light from the furnace holes upon the faces of the men, the blackness of the furnaces, the walls and surroundings with the smoky atmosphere of the room, rendered the scene a weird and impressive one. (*Boston Evening Transcript, *January 1, 1884)*

Once the glass had been shaped into its final form, a helper carried the piece to the annealing oven, or

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lehr, where it was reheated and then slowly cooled to give it strength and resistance to breakage. Because of the difficulties in controlling the temperature of coal-fired furnaces, the lehr was fired with rosin obtained in the South. When the supply of rosin was interrupted during the Civil War, the company began to use kerosene.

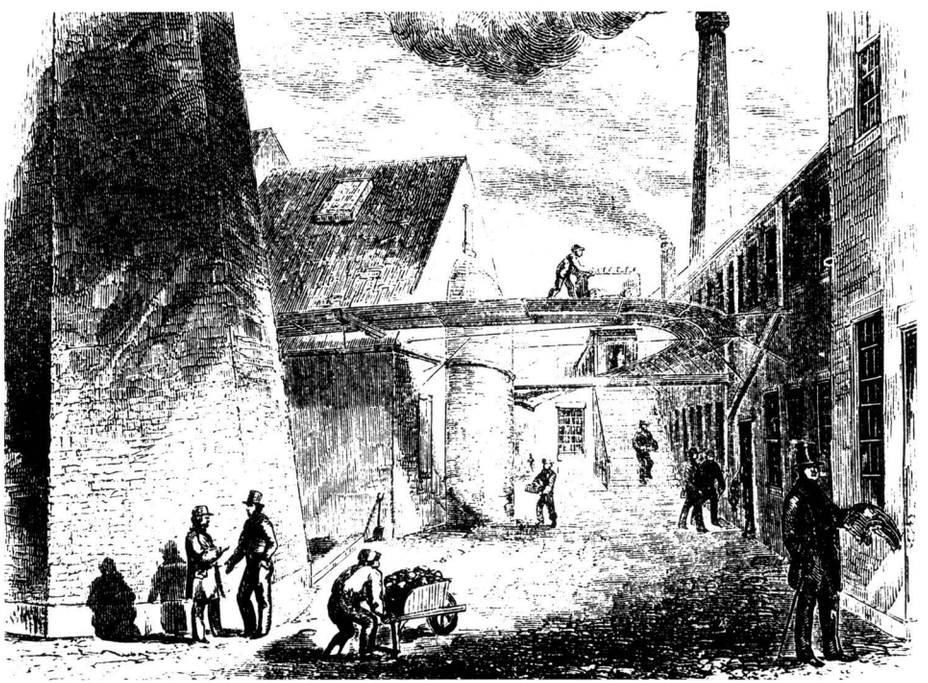
The 270-foot-long cutting room employed about 90 men in 1855, and was connected to the furnace floor by a tramway which carried small cars filled with glass (Fig. 355). About eighty wooden frames, or cutting stations, were set in rows down the middle of the room; each station held a cutting wheel driven by a leather belt from an overhead, steam-powered shaft (Fig. 356). From a system of wooden troughs above the stations, water and abrasive dripped onto each wheel, providing a cutting medium and cooling the glass against the friction of the wheels. Cut glass was passed from station to station, receiving finer and finer cuts, until it was ready for a final polishing with a paste compound.

Engraving, by contrast, was generally done by a single craftsman, whose designs and techniques were often his own invention and secret. The best work, which gave the company its reputation, was carried on in separate rooms by highly skilled engravers who worked in relative freedom from supervision or were themselves supervisors. The company's chief engraver from the 1850s on, Louis Vaupel, worked in a small room, where he used his own tools to create elaborate scenes and floral designs on glass (Fig. 357).

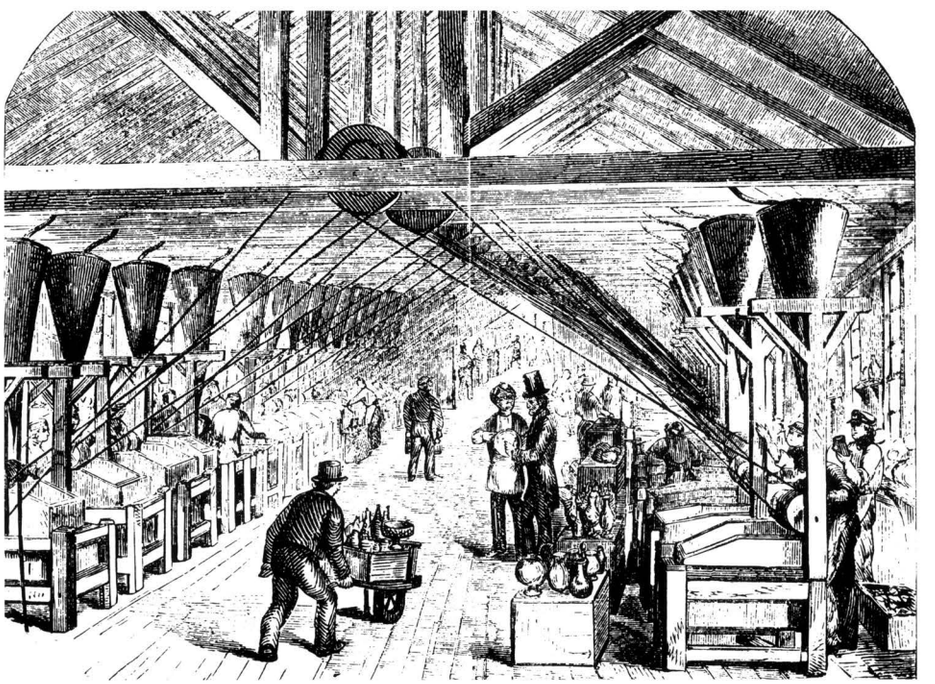
About 50 men also worked on the upper floors of the laboratory building, mixing glass ingredients, while machinists, blacksmiths, trim makers, and mold makers worked on the first floor on molds and metal fixtures for lamps and other glass objects.

The preparation of clay for pots and the production of red lead were among the most hazardous and disagreeable operations in the glassworks and used unskilled laborers who were paid low wages. The company employed 20 laborers in its furnace and kiln to refine the raw lead. Fumes and dust filled the air as ingots were melted, oxidized, and ground into a fine powder. For a dollar a day, workers were exposed to lead poisoning and almost certainly guaranteed an early death.

Nearby, other laborers processed clay to make the large pots for melting glass. They combined a mixture of new and old clay with water and then walked on the mixture with their bare feet for up to two months to prepare it for pot making. The conditions here were particularly grim, as described by an observer in 1857: "The work is done in a sort of vault or stable, each man in a separate wooden partition; and here for about



355. "Elevated railway and base of chimney," with glass cutting shop at right, New England Glass Company, 1855



356. "Glass-cutting room," New England Glass Company, 1855

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357. "A Stag at Bay," c. 1855–85, Louis Vaupel

a dollar a day, these poor fellows — chiefly Irish — tread, tread from early morn till dewy eve" (Pairpont, p. 156). This was unhealthy work; the constant immersion in wet clay promoted arthritis and bone disease.

Rates of pay varied greatly. Glassblowers were the highest-paid; after a seven-year apprenticeship, journeymen commanded premium wages, generally between $3 and $4 for a twelve-hour day in 1850. The shortage of skilled labor helped maintain the blowers' high wages in this period. Reportedly, American glassworkers earned from 50 to 100 percent more than their European counterparts.

Pressers in the early years of the factory were fairly low paid. As the skills required in pressing complex pieces increased, and as pressing became a more important part of the company's output, pressers' wages tended to rise relative to those of blowers. In 1850, pressers were paid half the wage of blowers, but by 1880 their wages had risen to three quarters that of blowers.

Engravers, cutters, finishers, and polishers received variable wages, averaging about $2 a day in 1850. When Louis Vaupel began work at New England Glass in 1851, he was paid $2 for a ten-hour day. His wages increased to $2.75 in 1859, and to as high as 48 cents an hour (about $5 a day) after the Civil War, but then dropped to 42 cents in 1875 and to only 30 cents after 1877. Engravers could increase their income by working overtime, taking work home, and instructing apprentices; in 1853, Vaupel earned an extra $50 a year for three years for teaching the superintendent's son, Henry Leighton.

Common laborers and helpers earned between $1 and $2 a day between 1850 and 1880. Some were apprentices who, by assisting the blowers and watching their movements, gradually learned the secrets of the trade. There were also a host of ancillary employees, who prepared for glassmaking, moved glass from the furnace to the cutting room, and packed glass. Twenty-five people worked in the sales area, where they earned only a dollar a day.

In 1855, the New England Glass Company was the largest employer in East Cambridge, but the 1860s marked the beginning of a difficult period for the company. In 1861, business declined substantially, and wages for craftsmen and officers were lowered by 10 percent, a significant amount considering that a top engraver was earning 27.5 cents an hour at this time. Hours were also decreased as business dropped, so that overall earnings were even less. This situation continued until early 1863, when business began to improve, but the cost of living also rose during the Civil War.

By 1864, the company was doing well once more, but developments in the glass industry threatened to undermine its position. That year, William Leighton, one of Thomas Leighton's gifted sons, perfected a formula for glass that used lime and soda instead of lead and produced a cheap but relatively good-quality clear glass for tableware. Leighton had served as superintendent from 1849 to 1858 and had added significantly to the company's profits by developing a formula for ruby glass, for which the company became well known in the 1850s. Leighton's later discovery, however, occurred while he was employed by a West Virginia glass factory, and it had an adverse effect on New England Glass by enabling other manufacturers to avoid purchasing its red lead. These manufacturers could then offer cheaper products for mass consumption.

Faced with the competition of cheap lime glass, New England Glass chose not to diversify but to continue to produce only fine-quality, expensive flint glass (Figs. 358–359). Considering the factory's earlier success, this decision did not seem unreasonable at first. The company had its own supply of red lead (a major cost in flint glass) and had built a solid reputation. Much of its glassware was elaborately cut and engraved, so that using the highest-quality glass made sound economic sense. However, a major part of the company's production was already in pressed glass, which enjoyed a wide market and could have used the cheaper lime formula.

New England Glass seriously underestimated the extent to which the cheaper glass would lower prices for everyday wares and place the more expensive leaded glass at a competitive disadvantage. It also appears to have overestimated the demand for its finer glassware and engraved work. Although the leaded glass was of better quality, lime glass looked the same and cost less, making it more suitable for an expanding market. The decision not to diversify ultimately proved to be the company's biggest mistake.

In the same period, the center of the industry was shifting westward, as many glassworks were started in Pennsylvania, Ohio, and Illinois. These firms had the benefit of lower fuel costs and better access to raw materials. They gained an additional advantage in the 1870s, when natural gas began to be used in glass furnaces. Between 1860 and 1880, western firms increased in number from 30 to 113, while the New England firms declined, from 15 to 13.

Its decision not to diversify did not immediately harm New England Glass, as it was participating in the postwar boom, but pressures soon mounted. In 1865, the company had approximately 500 employees and produced glass worth $500,000. In 1866, the factory suf-

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358–359. Showrooms at the New England Glass Company, 1875

fered an extensive fire, caused by kerosene used in the annealing ovens. The roof of the glass house collapsed, and the interior of an adjoining three-story building was destroyed. Although insurance covered the losses, nearly $20,000 worth of manufactured glass was ruined, and no new glass could be made until the buildings were repaired. In spite of this setback, orders were heavy, and chief engraver Vaupel reported working more hours in 1866 and 1867 and earning higher wages than at any other time in his long career.

Henry Whitney, Jr., who had been chief clerk at the factory, succeeded Joseph N. Howe, Jr., in 1865 as agent, a position his father had held until 1843. This initiated the company's decline, which Vaupel attributed largely to Whitney's ignorance and indifference to the process of glassmaking. By the early 1870s, Vaupel reported that although the best raw materials were used, much of the glass that was melted was ruined in the process:

The best customers got used to staying away because, after waiting long, they had to turn to other factories. . . . Moreover, the glass often was bad and not made to specifications, had bad color, air bubbles, stones and so forth. . . . Whole kegs full of it were smashed to pieces again as soon as it came out of the cooling-oven every morning. In this way some orders had to be reworked twice or three times. (Vaupel, vol. III, p. 18)

Business dropped off, and in 1872 the board of directors decided to replace Whitney with William Libbey, who had been the agent and part owner of the Mount Washington Glass Company, in South Boston and New Bedford. By this time New England Glass was losing money, and the value of its shares had fallen by half. Libbey went to Europe to hire better glassmakers and polishers to improve the quality of production. While this may have helped, it was very expensive, and the Panic of 1873 further reduced business, particularly for the finer cut and engraved ware.

The factory had not changed significantly since the major expansion in the early 1850s, although some of the buildings had been rebuilt after the fire of 1866. The number of employees dropped from a high of 500 in the 1860s to about 200 in 1875. Their hours also declined, so that overall wages fell substantially. Many unemployed glassworkers moved away, which had a major effect on the community.

In April 1874, the stockholders of New England Glass voted to close the business. Most of the foremen were dismissed and there was a general reduction in employees and wages, but the company continued to operate at a loss. Nonetheless, in 1876 it sent an impressive display of cut and engraved glass to the Centennial Exposition in Philadelphia. As described by Thomas Gaffield, a Boston observer of the glass industry in the 19th century, these "very rich" articles included "fruit stands, preserve and other dishes, in diamond pattern, many of the pieces being ornamented in addition with delicately engraved flowers and fruit and other exquisite designs." There were also wine glasses and goblets "engraved with charming designs of flowers, vines, etc., while others are massive and heavily cut." In spite of this opulent display, financial affairs at the factory did not improve.

At the annual meeting in 1877, it was revealed that the company was barely meeting expenses. Although there seemed to be some disagreement about the company's financial position, there was no doubt that the stock had fallen substantially over the past two years. A decision was made to close the factory, and it was advertised for sale or lease:

. . . this long established and well-known manufactory, consisting of 4 ten-pot furnaces, all the Buildings, Machinery, Cutting Shops, Moulds, Tools and appurtenances, and the Lead Works . . . all Materials that may be on hand so that the business and good will can be transferred without interruption. (Gaffield Collection)

The *Chronicle* lamented the closing, which would cost more than 200 people their jobs; many of them had apprenticed at New England Glass and had never worked anywhere else.

In November 1877, William Libbey leased the factory and began to run it at his own expense, but wages dropped to prewar levels and many of the remaining skilled workers left for other companies, particularly in New Bedford and Connecticut. The 1877 directory

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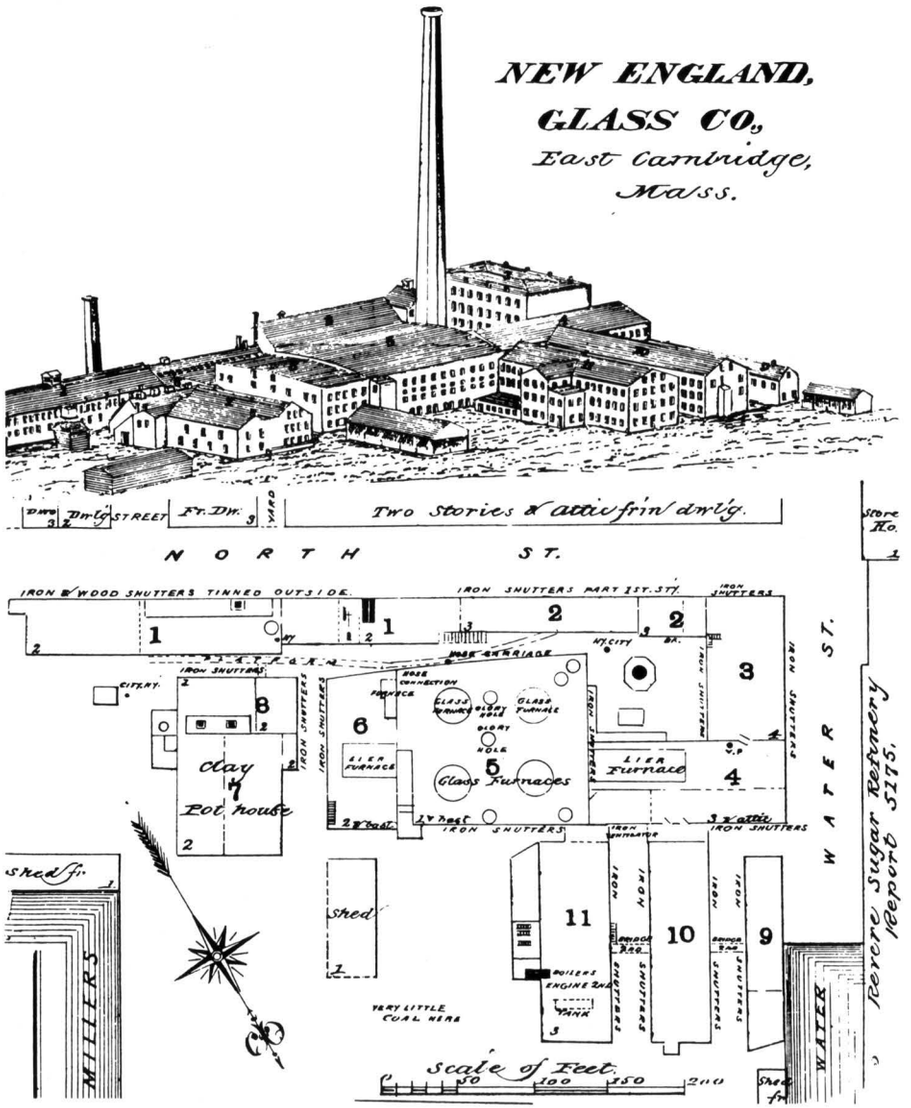
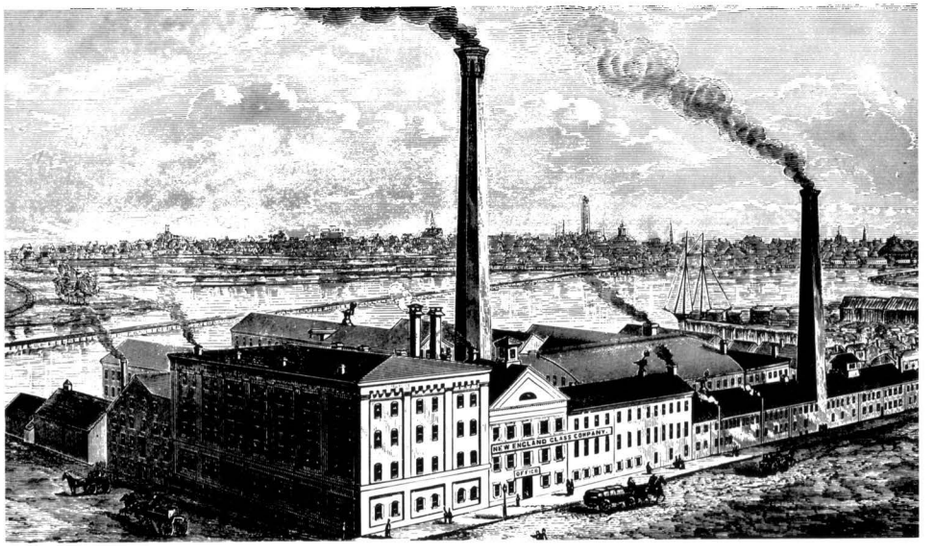
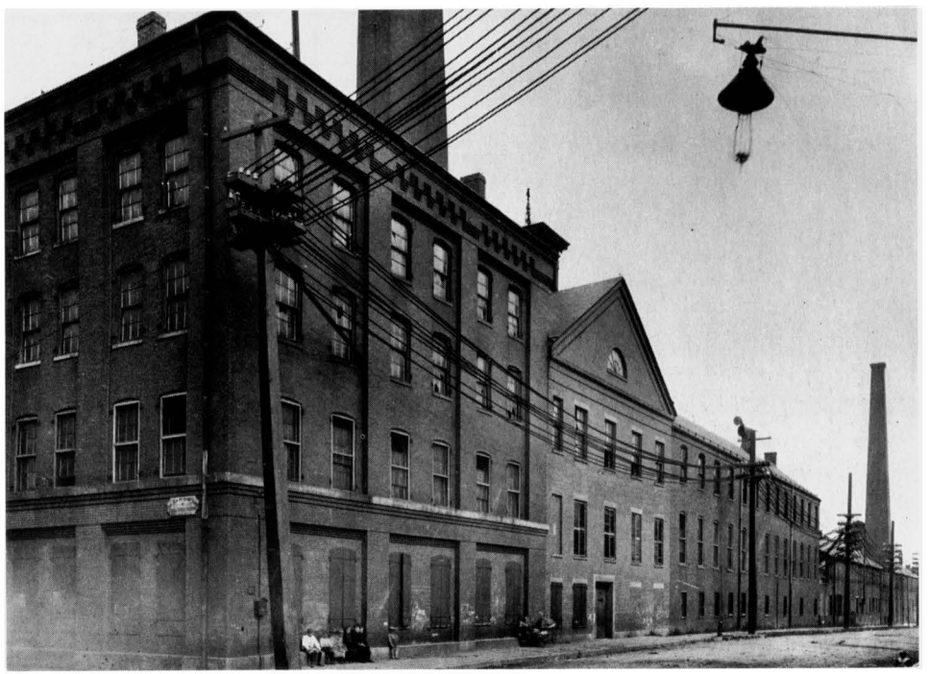


360. Plan and view of the New England Glass Company, 1882. 1, cutting shop; 2, showroom; 3, packing building; 4, old storeroom; 5, glass house; 6, lehr; 7, clay pot room; 8, lead ovens; 9, hay barn; 10, storage; 11, old machine shop



361. New England Glass Company, 1884; Miller's River and Charlestown in the background



362. Former New England Glass Company, North Street elevation, 1897

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listed 118 glassworkers living in East Cambridge, most of whom probably worked for New England Glass. By 1878, 40 had left, including all the engravers except Louis Vaupel. Vaupel recalled that there was little to do at the factory that year, and although he was given all the engraving work, he earned less than $100. He supplemented his wages with private commissions, but his overall earnings remained low.

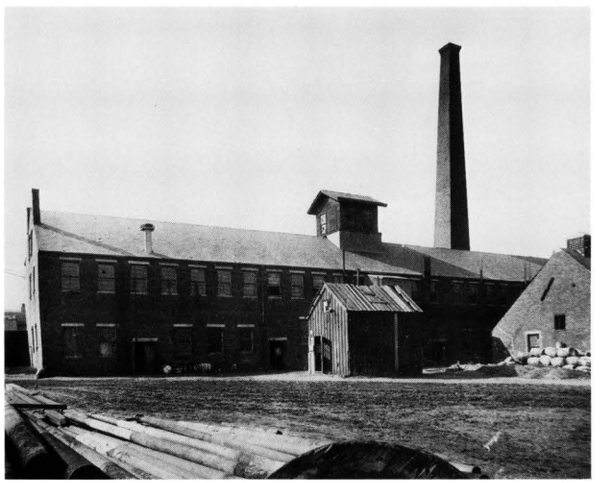
In the winter of 1877–78, the iron roof of the furnace room collapsed and no glass could be made until June. Only the manufacture of red lead continued as a major source of revenue for the company, as it had been steadily for sixty years. Only one ten-pot furnace was in operation in 1880, and output remained low.

Tastes in glass had changed significantly; the heavy cut and engraved ware that had established the company's reputation was now supplanted by lighter, more fanciful art glass in a variety of exotic colors. New England Glass had produced colored glass from the beginning and in the 1880s joined other companies in developing elaborate gradations of colors with such patented names as Amberina (1883) and Agata (1887). The company also experimented with novelty glass, such as the green and yellow Maize (1888), shaped to resemble corn on the cob, the last pattern developed in East Cambridge.

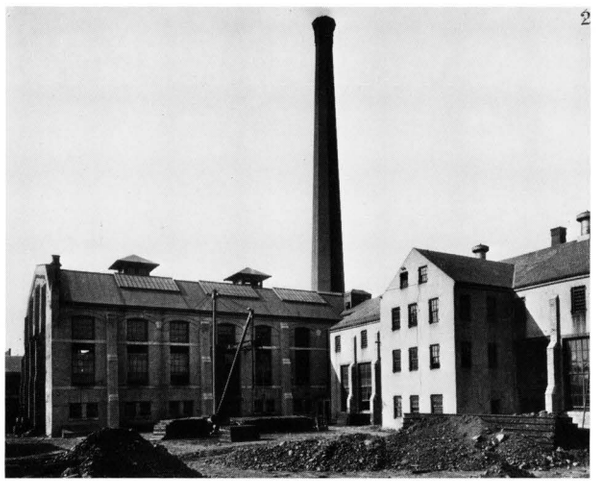
In 1883, William Libbey died and his son Edward assumed control. The following year, the company enjoyed a brief period of recovery, and employment climbed back to almost 300. A map made for insurance purposes in 1882 and the title page of an 1884 catalogue show the greatest extent of the factory (Figs. 360–361). Buildings filled most of the site, forming a varied facade stretching over 500 feet along North Street (Fig. 362). The four-story packing, decorating, and stockroom building, at North and Water streets, was by far the largest one visible from the street and the only one besides the office and showroom with any significant architectural decoration (Fig. 363). At the other end of North Street, the cutting shop was the oldest building in the complex (Fig. 364).

The ultimate demise of the New England Glass Company was caused by labor problems. By 1882, many of its employees had joined a union, which in 1885 became

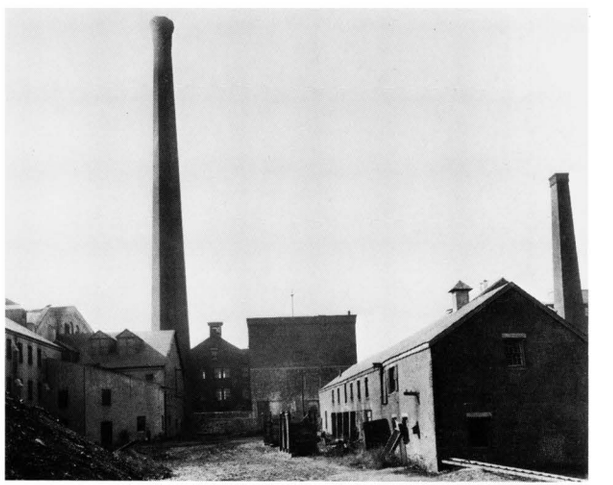
363. Former packing building, North Street opposite Short Street, 1897



364. Former cutting shop, with lead ovens at right, 1897



365. Former glass furnace, as converted to a power house by the West End Street Railway, 1897



366. Chimney, after demolition of storehouse and lehr building, 1897

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part of the American Flint Glass Workers Union; the organization included workers at the western glass firms, whose production costs and operations differed greatly from New England's. In October 1885, workers at New England Glass and at least fifteen other East Coast flint glass companies went on strike for higher wages and lower workloads for lampshade makers, and to equalize conditions throughout the industry. For New England Glass, the lampshade business was declining; the company wanted to phase it out and was certainly not willing to subsidize it by raising wages. Half of the glassblowers walked out. The others, described by Libbey as "those who have been with us the longest time," reported for work but soon went on strike with the rest. The fires were shut down and the factory closed, although the *Chronicle* reported on October 10, 1885, that "employees individually seem to make no complaint of dissatisfaction as to wages, and the company is said to have orders ahead sufficient to keep all hands at work through the winter."

The workers relinquished their demands, and the furnaces were restarted within a few weeks, but the crisis was only postponed. In January 1888, the workers went out again, and Edward Libbey closed the factory permanently. In August 1888, 50 carloads of machinery and glassmaking equipment and at least 100 workers moved with Libbey to Toledo, Ohio, where he continued to manufacture most of the New England Glass Company's products under the name of W. L. Libbey & Son Company. In 1892, it became the Libbey Glass Company and is now the Libbey Glass Division of Owens-Illinois, Inc. The move meant the end of the glass industry in East Cambridge.

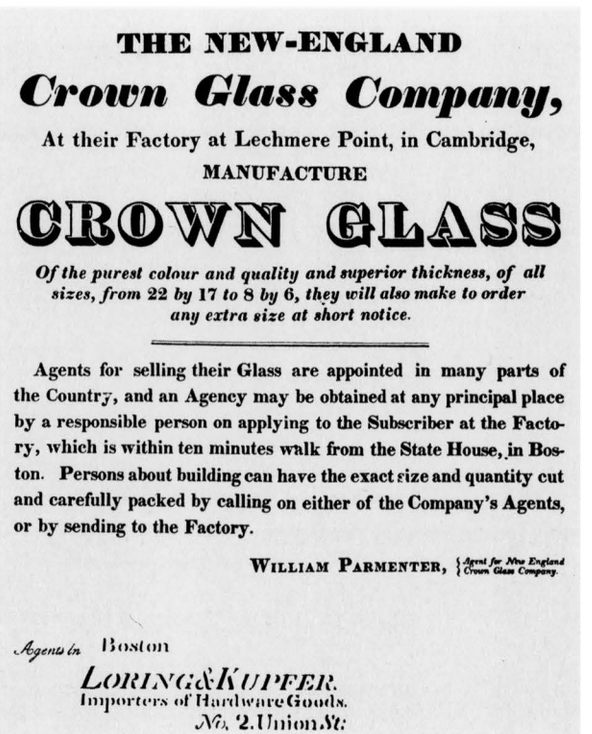
In 1890, the New England Glass Company was formally dissolved and the buildings were sold to the West End Street Railway, which spent a year converting the plant to a power station (Figs. 365–366). Some of the buildings were demolished and others were substantially rebuilt, but the massive chimney was retained with only slight changes. Electrification of the West End's horsecar routes had begun in 1889, and the Cambridge Station was intended to serve all routes north of the Charles River. Coal was received by ship, and in 1907 the Boston Elevated Railway, successor to the West End, substantially rebuilt the old glass company wharf on the Miller's River (see Fig. 67). Advances in power generation made the plant obsolete, however. It was sold to the Boston & Maine Railroad in 1921 and demolished soon thereafter.

The chimney was the last fragment of the New England Glass Company to survive, but it too was demolished in 1921. The site is now used for parking and warehouses, and no indication remains of its early importance in the development of East Cambridge.

The New England Crown Glass Company

In 1824, the four founders of the New England Glass Company formed a new company, the New England Crown Glass Company, to produce quality window glass (Fig. 367). On the north side of North Street between Short and East streets, the factory was adjacent to the older company and sold its products through its showroom in Boston. Crown glass was made without lead; it was harder than flint glass and superior in quality to plain window glass, characteristics that made it particularly useful for store windows. The new company produced glass that was particularly pure and of excellent color in a wide variety of sizes; it would also cut or bend glass to any pattern for fanlights or circular or bow windows.

Little is known of its operation. The works burned in July 1827, but soon reopened in new quarters on the same site. In 1831, it was the only crown glass factory in Massachusetts and produced about $100,000 worth of glass. At that time, it consisted of a single six-pot

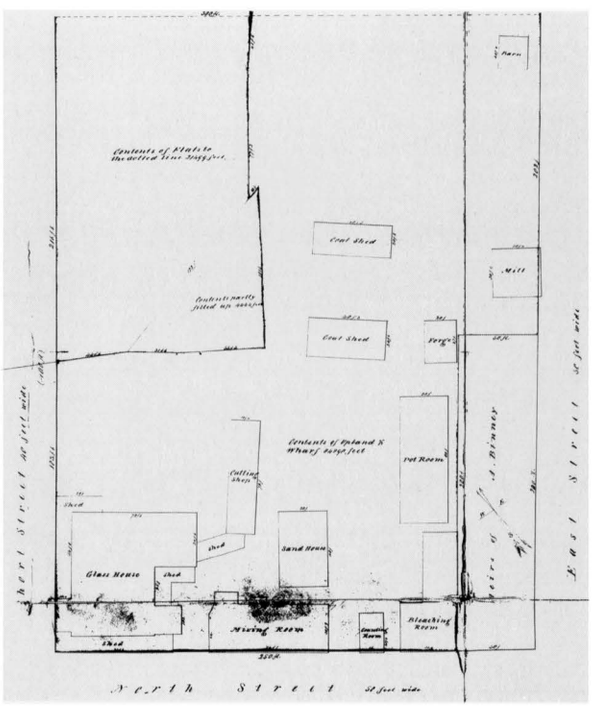

THE NEW-ENGLAND
Crown Glass Company,
At their Factory at Lechmere Point, in Cambridge,
MANUFACTURE
CROWN GLASS
Of the purest colour and quality and superior thickness, of all sizes, from 22 by 17 to 8 by 6, they will also make to order any extra size at short notice.

Agents for selling their Glass are appointed in many parts of the Country, and an Agency may be obtained at any principal place by a responsible person on applying to the Subscriber at the Factory, which is within ten minutes walk from the State House, in Boston. Persons about building can have the exact size and quantity cut and carefully packed by calling on either of the Company's Agents, or by sending to the Factory.

WILLIAM PARMENTER, {Agent for New England Crown Glass Company.

Agents in Boston
LORING & KUPFER.
Importers of Hardware Goods.
No. 2. Union St.

367. Advertisement for New England Crown Glass Company, 1824–38



368. Survey of New England Crown Glass Company, 1839

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furnace and employed 55 men and 10 boys. In 1836, the factory was successful enough to warrant a new furnace, but by 1838 the company had gone into bankruptcy and ceased operation. No explanation for its closing has been found. A survey made in 1839 showed the works to have consisted of five small, isolated buildings and a main glass house approximately 88 by 78 feet on the corner of North and Short streets (Fig. 368). The factory was sold to the New England Glass Company in 1842, and the remainder of the property was sold to various abutters.

The New England Glass Bottle Company

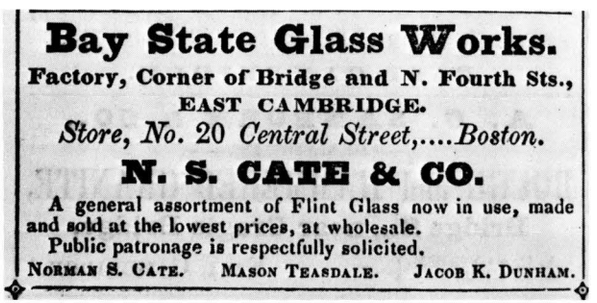
On February 15, 1826, Edmund Munroe and Deming Jarves incorporated the New England Glass Bottle Company, to manufacture black and green glassware in Boston and Cambridge. Jarves had been the clerk of the Boston Porcelain & Glass Company in 1817 and the agent for the New England Glass Company from 1818 until 1825, when he left to found the Boston & Sandwich Glass Company. Munroe was a proprietor of the Lechmere Point Corporation and a founder of both the Boston Porcelain & Glass Company and the New England Glass Company. In 1826, the new company bought from Munroe a parcel of land on the east side of South Third Street, southeast of the present brick row houses at 202–204 South Third Street, which became known as the bottle house block. Between Third Street and the marshes along the Charles River, the bottle works stood considerably apart from the other glass companies and, except for the pyrotechnics plant in the marshes to the west, it marked the southernmost development in East Cambridge in the first half of the century.

The company began operations in January 1827 and soon became a significant producer of glass bottles. Although it manufactured only bottles, carboys, and flasks, it also advertised an extensive assortment of flint glass manufactured by the Boston & Sandwich Glass Company and thus competed with the New England Glass Company. Nothing is known of the actual layout or operation of the factory, but in 1828 and 1829 production was extensive enough that the company purchased land in Lexington and at Fresh Pond in Cambridge to secure an adequate supply of sand. By 1832, the first year in which statistics are available, the works employed 40 men, 12 boys, and 11 women, and manufactured $55,000 worth of bottles a year. The men earned $1.30 per day, comparable to wages in other glass houses and for construction work, while the boys and women were paid less than half that amount.

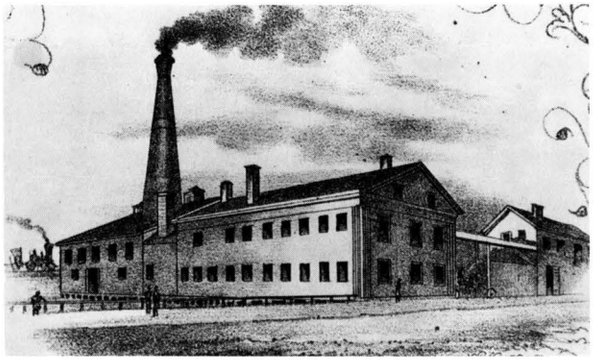
While the company became a significant producer of high-quality bottles, advertised heavily, and seemed to be thriving, it began to sell its sand pits in 1836, and in 1845 ceased operation altogether. Nothing is known of its reasons for closing; soon after, its plant was sold to L. P. Grosvenor of Connecticut for $1,700, less than half of what had been paid for the land alone in 1826.

The Bay State Glass Company

The most vigorous rival of the New England Glass Company was the Bay State Glass Company, which began to produce flint glass in 1849 on the north side of Bridge Street between Third and Fourth streets. The beginnings of the company are somewhat unclear. Norman Cate and Mason Teasdale bought P. F. Slane's American Glass Works in 1849; Slane's was listed in the 1847 directory, but nothing is known of its products or operation. Although Cate and Teasdale advertised their new company as the Bay State Glass Works as early as 1849, it was not formally incorporated until 1851 (Fig. 369). Until then, the company was generally known as Cate & Phillips (for Linus A. Phillips, the president).


Bay State Glass Works.
Factory, Corner of Bridge and N. Fourth Sts.,
EAST CAMBRIDGE.
Store, No. 20 Central Street,....Boston.
N. S. CATE & CO.
A general assortment of Flint Glass now in use, made and sold at the lowest prices, at wholesale.
Public patronage is respectfully solicited.
NORMAN S. CATE. MASON TEASDALE. JACOB K. DUNHAM.

369. Advertisement for Bay State Glass Works, 1849



370. Bay State Glass Works, 221 Bridge Street, 1852

The success of the New England Glass Company at this period probably encouraged the founders of Bay State Glass, but the new company remained relatively small. An 1852 view from Bridge Street shows the long main building handsomely detailed in the Greek Revival style, and a smaller square building containing the single furnace (Fig. 370). By 1854, the company had two furnaces in full operation and had built a three-and-a-half-story building on Bridge Street (Fig. 371). By 1855, it had substantial earnings, evidently keeping up well in its competition with New England Glass, although with fewer than 100 employees.

In 1856, Bay State Glass acquired a triangular piece of land between the Boston & Lowell Railroad and the seawall along the Miller's River. The company dug a tunnel through the railroad embankment so it could transfer sand and coal from the wharf to the factory. Access to water transportation continued to be a major factor in the company's successful operation; this company and New England Glass never had railroad sidings, since coal was more cheaply shipped by sea.

In February 1857, fire destroyed the Bay State buildings containing the furnaces and molding and packing rooms as well as a storage building containing a large quantity of finished glassware. The loss was estimated at $40,000, only one quarter of which was covered by insurance. The company was back in full operation by

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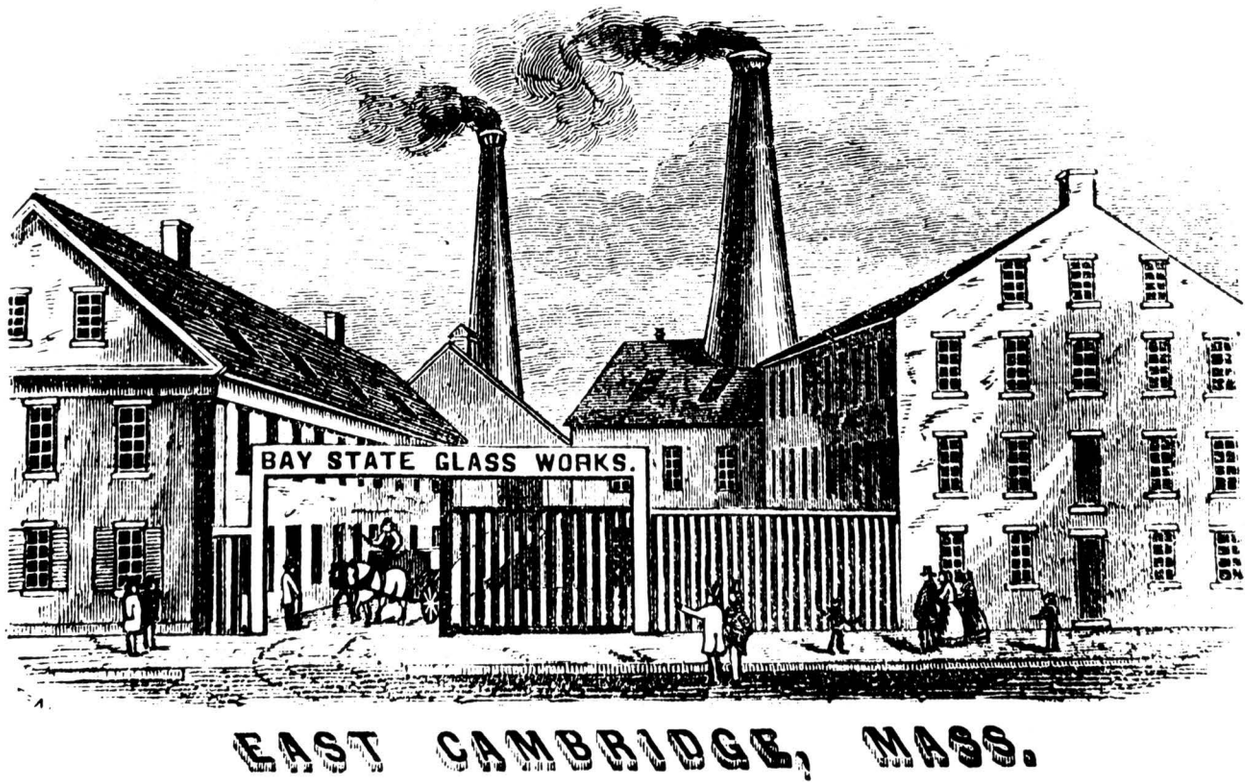
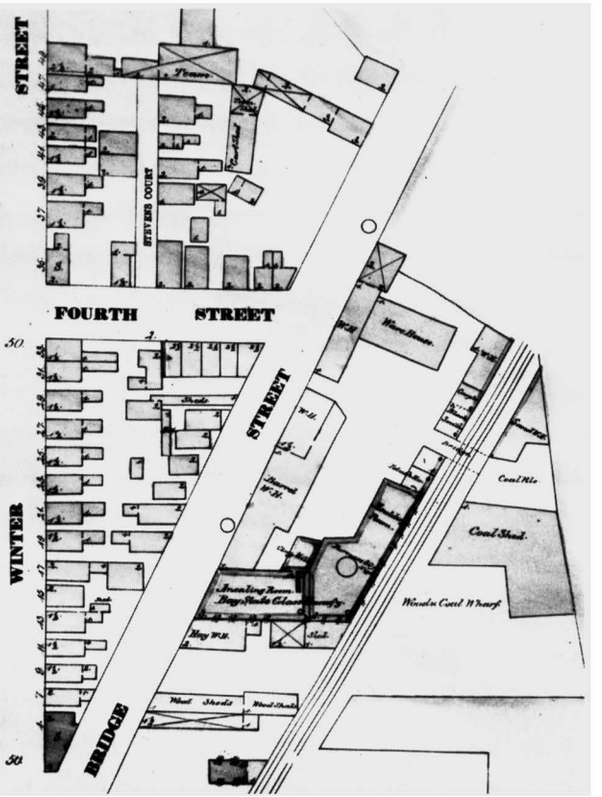


371. Bay State Glass Works, 1854



372. Plan of Bay State Glass Works, 1868

April, having erected substantial new fireproof buildings and enclosed the two furnaces that had survived the fire relatively unharmed.

By 1859, the company was entirely out of debt and once again doing well (Dun, Mass. vol. 49, p. 211), and the 1860s seem to have been its period of greatest success. Advertisements at this time offered plain, molded, cut, and engraved flint glassware as well as all kinds of apothecary, chemical, and philosophical (scientific) glassware, lamps, silvered glass, and reflectors. The main salesrooms were in Boston (as were those of most other East Cambridge glass factories). The 1865 Massachusetts Census reported 653 people working for the two glass factories operating in East Cambridge that year; of these, about 150 worked for Bay State and the rest for New England Glass. The 1868 Sanborn map shows the greatest extent of Bay State's operations (Fig. 372). Buildings ringed the site, and one furnace was in operation.

In 1872, business began slipping, and the following year the Bay State Glass Works closed, a victim of the Panic of 1873. By this time, the New England Glass Company was beginning to have its own troubles and was in no position to purchase the smaller factory, as it had done when New England Crown Glass foundered. On May 1, 1874, the factory buildings and land were sold at public auction for $45,000 to John P. Squire, whose extensive meatpacking plant stood not far away, on Gore Street near Sixth. There was some attempt to keep the factory in production under the new owner, and from 1877 until 1879 the Boston Bottle Works, whose buildings in Somerville had burned, used the Bay State factory. The main building survived into the 20th century and was used by Squire in his meatpacking operations after glassmaking had ceased.

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Industry Along the Charles and Miller's Rivers, 1855–1914

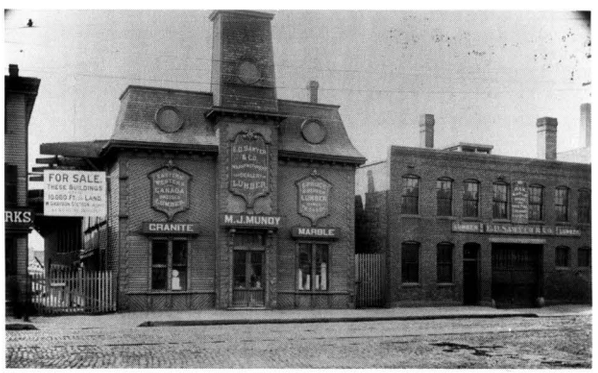
373. Bird's-eye view of East Cambridge from the north, 1879

In the second half of the 19th century, woodworking, meatpacking, and metalworking gradually supplanted the once-dominant glass industry. In most cases, proximity to Boston via the Canal Bridge (which eliminated its tolls in 1858), the railroads, and the wharves along the Charles and Miller's rivers were major attractions.

By 1880, six East Cambridge firms besides the New England Glass Company employed more than 100 workers. All stood on the periphery of the neighborhood: Squire's packinghouse on Gore Street; Shaw, Applin & Company, F. M. Holmes, and Geldowsky, all furniture factories, on Bridge, Cambridge, and Otis streets; American Net & Twine on Second Street; and H. M. Sawyer's oiled clothing factory on Thorndike Street (Fig. 373).

The largest firm was John P. Squire's slaughterhouse and meatpacking plant, which eventually stretched from Sixth Street west into Somerville. By 1873, eight other meatpackers had settled along the Miller's River near the western edge of East Cambridge, although most were in Somerville and do not figure in this study. The unrestricted discharge of slaughterhouse waste into the Miller's River generated unprecedented public action against polluters in Massachusetts and was the impetus for filling the upper reaches of the stream in the 1870s.

Rivaling meatpacking in importance were factories that made furniture, organs, coffins, and other wood products. All settled in East Cambridge because it was a major port for lumber. Large lumberyards such as W. S. Blanchard and S. A. Holt & Company had wharves off East Street, while others lined the south side of the Canal Bridge (Fig. 374). By 1895, the major furniture factories dominated the blocks south of Cambridge Street between First and Second streets. As in the early 19th century, smaller shops for making barrels, ladders, and coffins were established primarily along Bridge and Gore streets, close to the river and the lumberyards. As these companies grew, they tended to move south of Charles Street or west toward Ninth Street to take advantage of the industrial sidings of the Boston & Albany. Typical was Goepper Brothers' barrel factory, which was established on Gore Street in 1872, but moved to Ninth and Spring streets in 1880 to expand its plant, mechanize its operation, and gain access to the railroad. Only William Lockhart's



374. E. D. Sawyer & Company, 16 Cambridge Street, c. 1875. Photograph 1900

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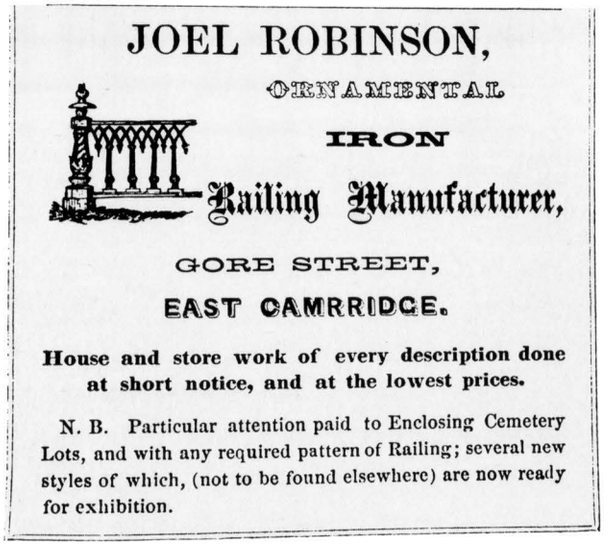

JOEL ROBINSON,
ORNAMENTAL
IRON
Railing Manufacturer,
GORE STREET,
EAST CAMRRIDGE.
House and store work of every description done at short notice, and at the lowest prices.
N. B. Particular attention paid to Enclosing Cemetery Lots, and with any required pattern of Railing; several new styles of which, (not to be found elsewhere) are now ready for exhibition.

375. Advertisement for Joel Robinson, 1861

coffin factory expanded at its Bridge Street location.

Ninety percent of the blacksmiths and harnessmakers in East Cambridge were located on Bridge, Gore, and Cambridge streets near the bridge. Metalworkers and foundries, such as Joel Robinson (later Jones & Bartlett), manufacturers of ornamental iron railings, also chose sites nearby (Fig. 375).

East Cambridge's access to ocean shipping continued to attract new companies. The Revere Sugar Company settled on the Miller's River just a few years before the sewage controversy. East of First Street at the edge of the Charles River was a nearly continuous row of lumber and stone yards, similar to those along the south side of the Canal Bridge. Coal, oil, and chemicals were delivered by water to factories on the Broad Canal and along the Charles River.

The demise of the New England Glass Company in 1888 underscored the decline of the historic center of East Cambridge industry, north of Bridge Street. From the 1880s on, the focus of industrial growth was on the newly filled land south of Charles Street served by the Boston & Albany Railroad. Spurs laid along Rogers Street (1876) and Munroe Street (1909) and private sidings running directly into individual factories further increased the desirability of this area for new industry.

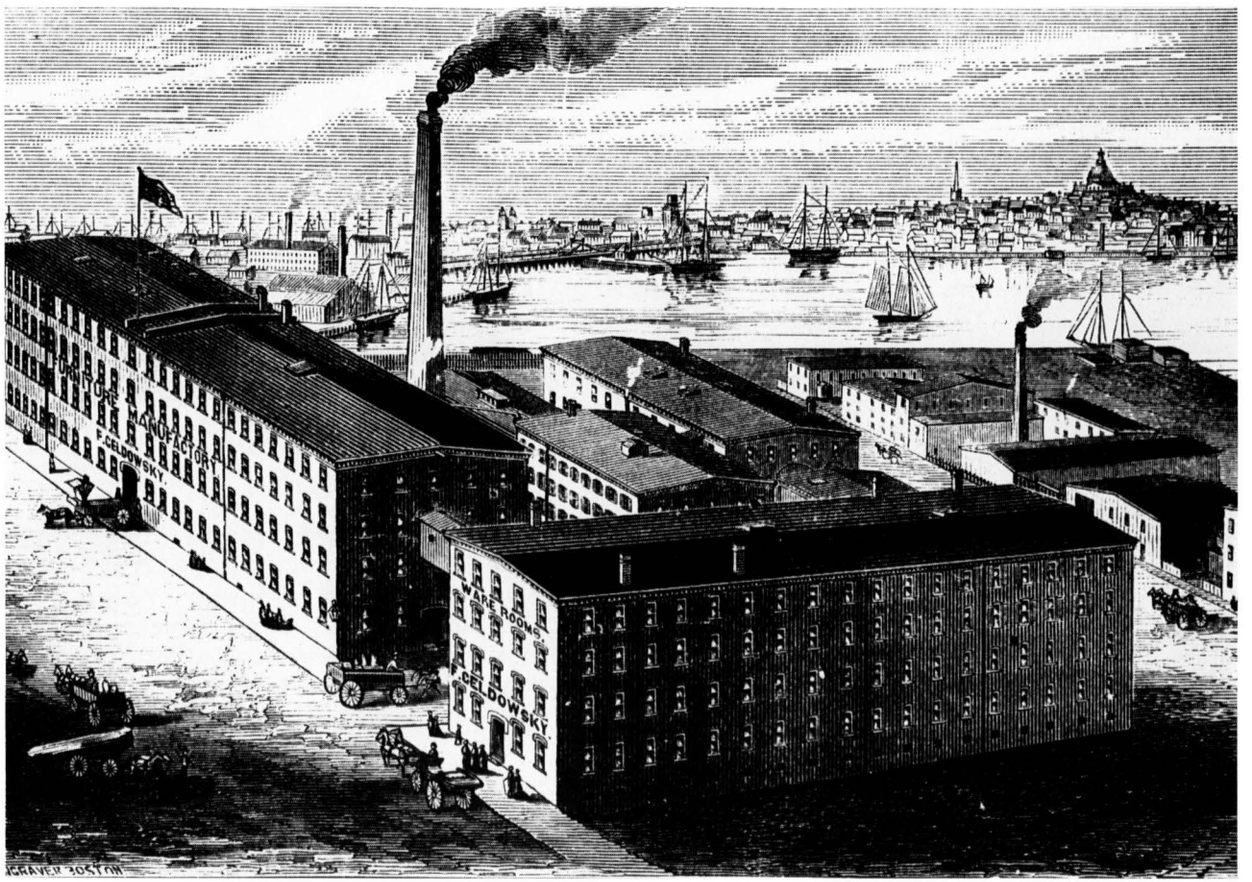
Furniture Manufacturing

First Class furniture at wholesale prices. F. Geldowsky announces to the public that he is now retailing a full line of high quality furniture at his factory on Otis Street (between First and Second), East Cambridge. Where he can sell LOWER than Boston houses, as his warerooms are connected with his factory, his business concentrated, and his expenses less.

1878 *Cambridge Directory*, pp. 14–15

From the Civil War until after World War II, East Cambridge was widely known for the high quality of the furniture produced by a number of often related firms (Fig. 376). The industry was closely linked with its larger counterpart in Boston: almost every major furniture company had originated in Boston, and most maintained retail outlets there.

The developing industry included both cabinetmak-



376. "Geldowsky's furniture establishment," 1879

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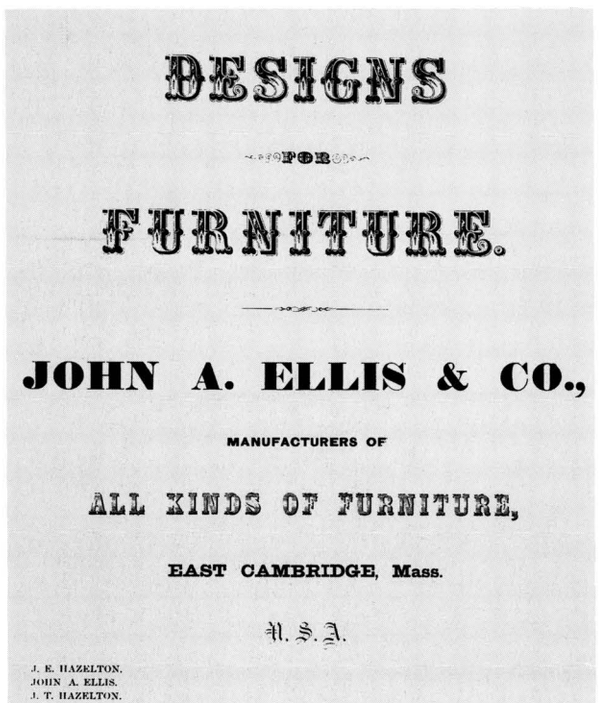
ers and manufacturers. Broadly speaking, cabinetmakers were hand craftsmen who operated small businesses, often out of shops attached to their homes, while manufacturers ran large industrial operations. The growth of furniture manufacturing in East Cambridge coincided with the introduction of steam-powered, mechanized techniques to the industry as a whole. As the century progressed, the development of industrial-scale furniture factories became far more significant in East Cambridge than the practices of independent craftsmen. Yet the large firms produced high-quality goods that frequently required custom designs and hand finishing.

Most of the small cabinet shops were clustered on Cambridge and Bridge streets near Lechmere Square, while the factories were almost all south of Cambridge Street and east of Second Street. The factories generally began in Boston and later moved to Cambridge, although two began in Cambridge and Boston simultaneously. Only John A. Ellis, the first manufacturer to settle in East Cambridge, had no Boston ties. He was followed in the 1860s by Ferdinand Geldowsky and Braman, Shaw & Company. These remained the major East Cambridge manufacturers into the 1880s. Two other firms, Badger & Batcheller on Bridge Street and Beal & Hooper at 108 Cambridge Street, were also established in the 1860s, but the Boston fire of 1872 and the Panic of 1873 took their toll, and by 1875 both had gone out of business.


DESIGNS

FOR

FURNITURE.

JOHN A. ELLIS & CO.,

MANUFACTURERS OF

ALL KINDS OF FURNITURE,

EAST CAMBRIDGE, Mass.

U. S. A.

J. E. HAZELTON.
JOHN A. ELLIS.
J. T. HAZELTON.

377. Title page, John A. Ellis & Company furniture catalogue, c. 1860

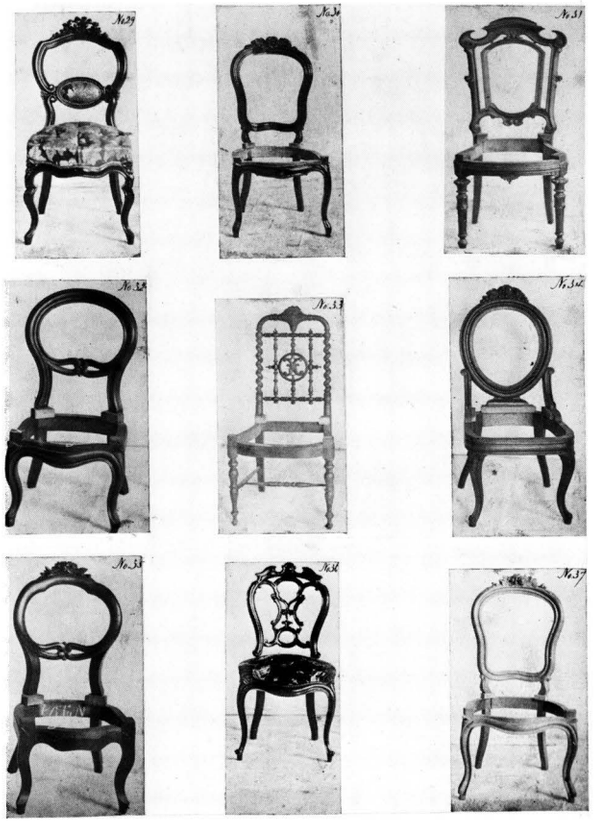
The 1880s, an era of economic prosperity and widespread building activity, witnessed the establishment of five additional furniture manufacturers in East Cambridge, all with Boston origins. Three of these firms — A. H. Davenport, Irving & Casson, and C. P. Keeler & Son — lasted well into the 20th century and achieved national prominence.

Factories in East Cambridge and Boston differed considerably. According to the 1875 Massachusetts Census, the Boston industry was much larger, with 105 manufacturers compared to only 12 in Cambridge, but the typical Cambridge company employed more people and produced proportionately more in terms of value. The 1880 census reported that the Cambridge factories were generally large operations run by steam and staffed by up to 240 salaried workers, while 94 percent of the Boston shops employed fewer than 50 people and paid many of their workers by the piece.

The work force in both cities was composed almost entirely of males over fifteen years old, and a high proportion were foreign-born — 41 percent of all furniture workers in Boston, 53 percent in Cambridge. In the 1873 directory, skilled craftsmen and cabinetmakers in the furniture industry comprised 10 percent of the working population in East Cambridge.

John A. Ellis & Company

The first major furniture manufacturer to establish himself in East Cambridge was John A. Ellis, who was first listed as a cabinetmaker in the 1851 directory. By 1860, he had established his own shop on Gore Street near the corner of Sixth Street. The 1860 *Census of Manufacturers* listed John A. Ellis & Company as a cabinetmaker with $60,000 invested in his business, which employed an average of 100 workers and was powered by steam — a large operation for the period. After twenty years of industrialization, only seven East Cambridge firms employed 100 or more.



378. Chairs made by John A. Ellis & Company, c. 1860

The firm, a partnership of Ellis and Jonathan E. and Joseph T. Hazleton, advertised in an 1861 Boston directory as manufacturers of "First-class furniture of Every Description," in black walnut, oak, and chestnut, as well as mantels, bookcases, stairs, newel posts, and balusters. Business was good, and in 1861 Ellis moved into a handsome, freestanding brick house at 100 Otis

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Street (see Fig. 207), one of the most fashionable residential locations in East Cambridge, leaving his former home at 6 Sixth Street, near Squire's meatpacking plant.

In spite of this seemingly healthy state of affairs, the company failed in 1861 and was dissolved in 1862 (Dun, Mass. vol. 49, p. 178). By 1863, Ellis was back in business on Gore Street and by 1865 had taken a partner, Joseph M. Doe, into business with him. Several Ellis pieces survive from this period, including a set of armchairs made for the Faculty Room of University Hall at Harvard. A catalogue published about 1860 was a very early use of photography for advertising (Figs. 377–378).

In 1867, Ellis & Company listed a Boston office as well as the Gore Street factory. An 1868 map shows the factory at the corner of Gore and Sixth streets, with a wharf, a three-story warehouse, lumber sheds, and a planing mill on the Miller's River. After Ellis died, in 1870, the firm was reorganized as Doe & Charmois, which retained the East Cambridge factory site as well as a Boston office. The firm was known as Doe & Hunnewell from 1875 until 1895, but after 1882 it was no longer listed at an East Cambridge address.

Ferdinand Geldowsky

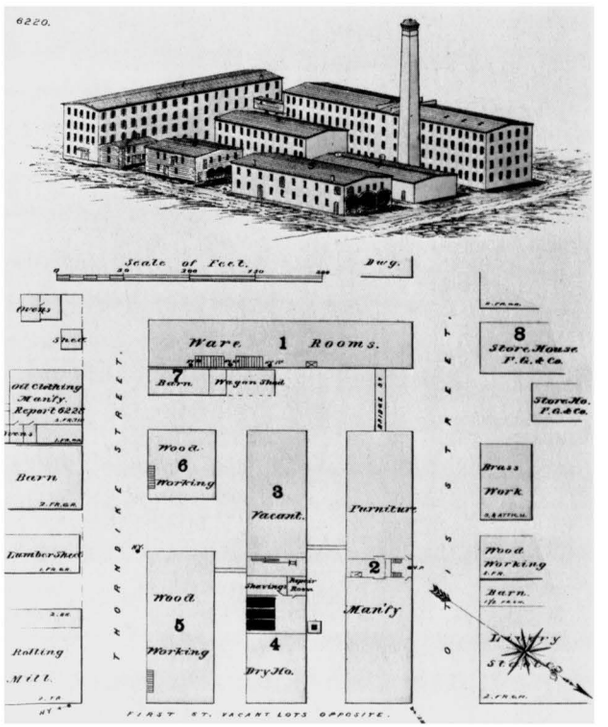
Ferdinand Geldowsky was chiefly responsible for bringing large-scale, high-quality furniture manufacturing to East Cambridge and for establishing the two blocks between Cambridge, Thorndike, First, and Second streets as the furniture district.

Geldowsky was born in Berlin in 1830 and came to the United States when he was seventeen. After working in New York for ten years, he moved to Boston and established a furniture shop in the South End, on Utica Street, in 1857. In 1863, he moved his residence to 80 Otis Street and his business to the corner of First and Otis streets, where he advertised as a center table manufacturer and furniture dealer. Geldowsky leased some wooden buildings from the Woodbury family, who ran a planing and moulding mill in the same block of First Street. The terms of the ten-year lease signed in 1863 indicate that Geldowsky already had extensive manufacturing capacity. James Woodbury agreed to furnish exhaust steam direct from his dry house nearby in order to heat Geldowsky's building and to supply two glue heaters and two caul heaters (veneer presses). He also agreed to provide power to run two planers, three circular saws, two moulding machines, six jigsaws, three boring machines, two lathes, a jointing machine, and a grindstone. By 1866, insurance reports indicate that Geldowsky was doing "a very considerable business," although he was described as having "rather extravagant flourishes" that kept him from profiting as much as he might otherwise (Dun, Mass. vol. 50, p. 328). In 1866, he employed 40 people; in 1867, 75; and in 1868 employment reached 200.

The *Chronicle* reported in 1869 that Geldowsky suffered a $90,000 loss when a wooden building he was renting burned in a fire that began in Woodbury's planing mill. It was soon rebuilt in brick by Woodbury and still stands at 2–24 Otis Street (see Fig. 387). Terms for the lease of this new building disclose the expanded nature of Geldowsky's business, for he now required steam for seven glue heaters, nine caul heaters, and forty-seven glue pots. Woodbury also agreed to heat a drying house "by means of steam pipes night and day, to temperatures sufficient for kiln drying of black walnut lumber" (Woodbury lease, Middlesex County deeds, 1100/415). The description gives a good indication of Geldowsky's products: the elaborately carved and veneered parlor, dining room, and bedroom suites of the 1860s and 1870s in Renaissance, Rococo, and Gothic Revival styles (Fig. 379).

Another fire occurred in 1871, but the business rebounded within a few months (Dun, Mass. vol. 50, p. 328). Soon after, Geldowsky began buying land in the middle of the block between Otis and Thorndike streets. By the end of 1869, he had acquired a strip of land 40 feet wide, with frontage on both Otis and Thorndike streets, with a deed restriction that prohibited the erection of a wooden building. After the earlier fires, he was not interested in wood structures. In 1871, he put up the four-story brick building, 200 by 40 feet, that served as the factory and showroom for the remainder of the company's life. This building at 28 Otis (and 27 Thorndike) Street shows up in the

379. Advertisement for Ferdinand Geldowsky, 1868



380. Plan and view of F. Geldowsky & Company, 1880

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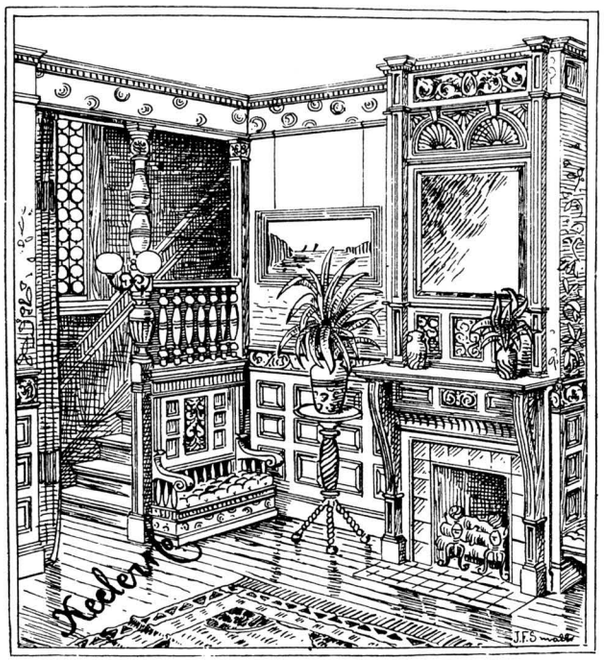

381. An interior designed and furnished by Keeler & Company, 1888

foreground of a view published in *King's Handbook of Boston*. It still stands, although it was somewhat altered by Irving & Casson in 1903 (see Fig. 376).

By 1873 the company occupied four buildings, two of which were four stories high and more than 200 feet long. But the financial difficulties of the 1870s adversely affected the business, or perhaps Geldowsky's personal extravagance caught up with him, and in 1877 C. P. Keeler & Company, a Boston furniture company, took over the plant, retaining Geldowsky as manager. The company apparently kept the Geldowsky name, as the directories for this period show no changes. The company had 240 employees in 1880, and produced $260,000 worth of furniture (Fig. 380). By 1883, employment had risen to 350, and the company's furniture was sold throughout the United States and in Great Britain, South America, and Australia.

In 1884, Keeler returned control to Geldowsky, who ran the plant successfully and manufactured "a fine assortment of first class furniture," which was marketed both at the factory and at Keeler's showroom in Boston (Dun, Mass. vol. 51, p. 788). By 1886, Geldowsky was doing "a very fair business" and "carrying a stock worth $60,000 to $70,000 clear"; an insurance report described him as "the best manufacturer in his line in New England" (Dun, Mass. vol. 50, p. 733). In spite of this rosy picture, he declared "voluntary insolvency" in July 1887 and by December 1, 1888, was out of business (Dun, Mass. vol. 51, pp. 869 and 898). Again, Keeler & Company bailed him out, taking control of the plant but allowing Geldowsky to work there until his death, in 1890.

Despite his periodic financial difficulties, Geldowsky had a substantial influence on the development of the furniture industry in East Cambridge. In twenty-seven years, he had evolved from a small Boston cabinetmaker to a high-volume East Cambridge manufacturer. Using the latest technology, he produced an excellent line of furniture in his specialty, center and library tables, as well as a variety of parlor and chamber suites. Some of his most important commissions included furnishings for the Cambridge City Hall and the extension of the Massachusetts State House. In the 1880s, he employed a number of highly skilled craftsmen — including French marquetry cutters and Italian woodcarvers — who added a handcrafted touch to his mass-produced furniture. This combination of technology and careful hand finishing, as well as the practice of retailing furniture both at the factory and through established Boston furniture warerooms, established a pattern that was followed by other East Cambridge furniture makers.

Keeler & Company, which had established close ties with Geldowsky's firm in the 1870s and 1880s and succeeded it in 1888, moved its business from Cambridgeport to East Cambridge after Geldowsky's death. The firm occupied the large four-story frame wing at 50 Second Street, which Geldowsky had built in 1886. Although Keeler retained some of Geldowsky's workers, the company was considerably smaller than the earlier firm and occupied less than one fifth of its space.

Keeler specialized in custom furniture and had two designers, one a Mr. Tomlinson, an English architect who was hired in 1888 specifically to introduce the English designs that were becoming popular. Like the other East Cambridge firms of the period, Keeler designed individual pieces of furniture and complete interiors (Fig. 381), but he also did upholstery, drapery, and shade work. The firm was last listed in the 1905 directory, and the building was subsequently taken over by Irving & Casson.

Braman, Shaw & Company

The third furniture company to settle in East Cambridge in the 1860s, Braman, Shaw & Company, lasted the longest. With roots in 18th-century Boston, it survived in East Cambridge until the 1930s, although none of its principals lived there. Braman, Shaw & Company was first listed in the 1866–67 directory as having a frame factory on Bridge Street near Craigie's Bridge and a wareroom in Boston (Fig. 382). In the 1860s and 1870s, it specialized in upholstered parlor suites, sofas,

382. Braman, Shaw & Company, 54 Bridge Street. Photograph 1866–78

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recliners, and rocking chairs; church and lodge furniture were added after 1876 (Fig. 383). The company went through several reorganizations. It became Shaw & Applin in 1878 and A. B. & E. L. Shaw in 1889, moving its factory from Bridge Street to Geldowsky's vacated wareroom at 28 Otis Street.

By 1896, Shaw was a major manufacturer, with between 150 and 200 employees. Considered one of the largest makers of fine upholstered furniture in New England, it expanded to fill the rest of Geldowsky's building on Second Street, but never built a factory of its own.

383. Advertisement for Braman, Shaw & Company, 1865

384. Beal & Hooper factory, 1866, left; A. H. Davenport addition, 1886, Robert Brown, Jr., center; Irving & Casson–A. H. Davenport manufacturing building, 1924, S. C. Sperry, right, with Deran Confectionery Company additions, 1960–66. Photograph 1968

A. H. Davenport and Irving & Casson

Most important in establishing the nationwide significance of furniture manufacturing in East Cambridge were the firms of A. H. Davenport and Irving & Casson, which dominated the field well into the 20th century. They settled across Otis Street from each other in the 1880s, began collaborating after 1890, and merged in 1914 to become the Irving & Casson–A. H. Davenport Company.

In 1880, Albert H. Davenport, a native of Malden, purchased the Boston furniture company of Ezra Brabrook, for whom he had been working since 1866. In 1883, he moved the business to the four-story factory of 1866 at 108 Cambridge Street after Beal & Hooper, its previous owners, had gone into bankruptcy. Between 1883 and 1903, Davenport grew until his operations covered much of the east half of the block between Cambridge and Otis streets.

His first expansion was to the west on Cambridge Street, where in 1886 he extended the 1866 building by ten bays, continuing its window and cornice detailing. The building survives at 108–134 Cambridge Street as part of the Deran Confectionery Company, although the 1886 section was raised a story in the 1960s (Fig. 384). In 1886, Davenport also built a four-story brick building at 21 Otis Street (also remodeled in the 1960s). The following year, Davenport built two

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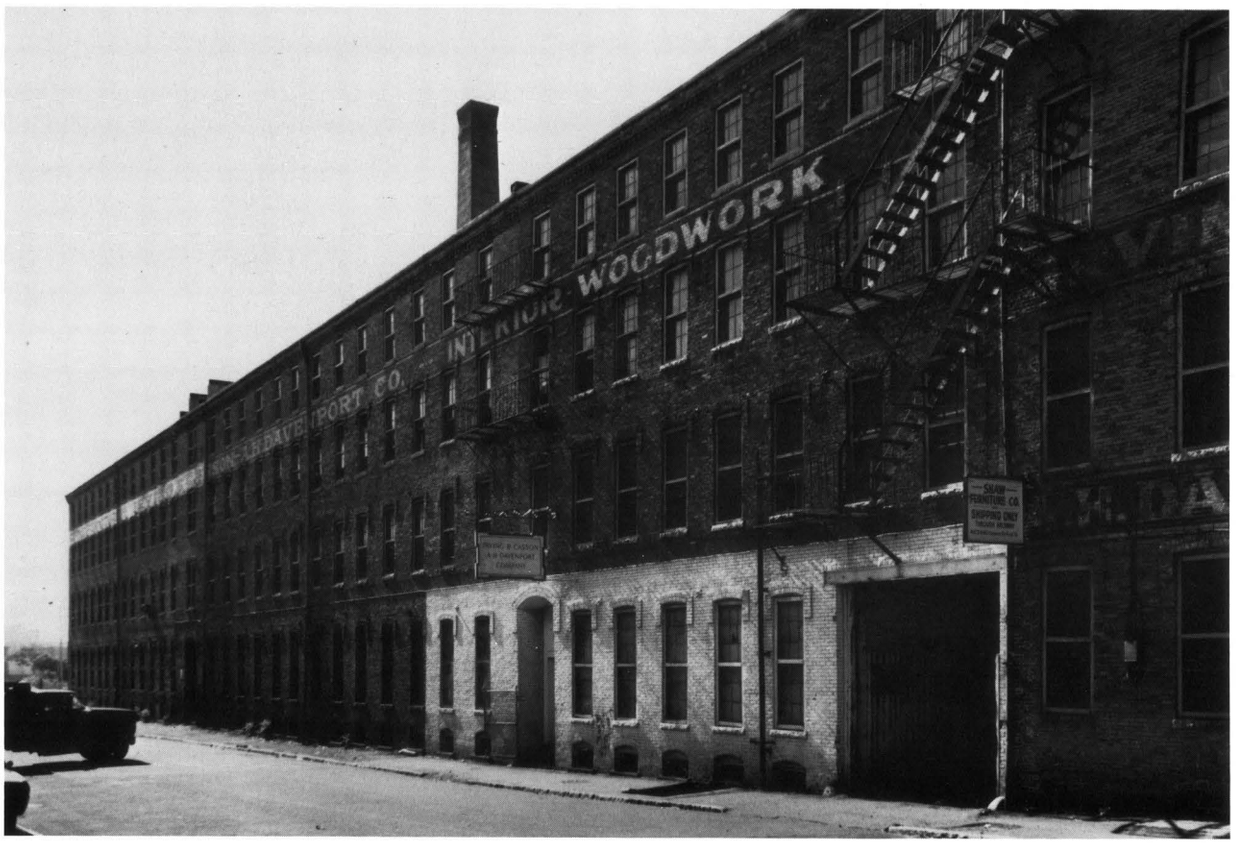
385. A. H. Davenport Company drawing of cabinet, c. 1895–1900

386. Irving & Casson factory, 2–24 Otis Street, 1869

single-story brick dry houses, or lumber kilns, behind his factory. When Irving & Casson moved to 2–28 Otis Street in 1893, Davenport's property covered a major part of the block between Cambridge and Otis streets west of First. Davenport died in 1906, but his business continued successfully in the same location until the merger with Irving & Casson.

Davenport was interested in producing the finest and most elegant furnishings in a variety of styles (Fig. 385). The company's name also became associated with a type of sofa that was popular at the time. The firm supplied furnishings and interior decoration to a variety of private and public clients, relying for inspiration on its extensive collection of art and architecture books.

The high quality of Davenport's designs may be attributed to Francis H. Bacon, who served as the company's designer and vice-president from the 1880s until 1908. Trained as an architect at MIT and in the office of H. H. Richardson, Bacon was able to integrate his knowledge of architecture with a sense of interior design to produce furnishings that harmonized with a variety of styles. Using architects as chief designers was a practice of the major East Cambridge furniture firms in the late 19th century and indicates the intent of these companies to influence entire interior design schemes, not just to supply single pieces of furniture.



387. Irving & Casson–A. H. Davenport factory, 2–28 Otis Street, 1869, 1871, 1897. Photograph 1968

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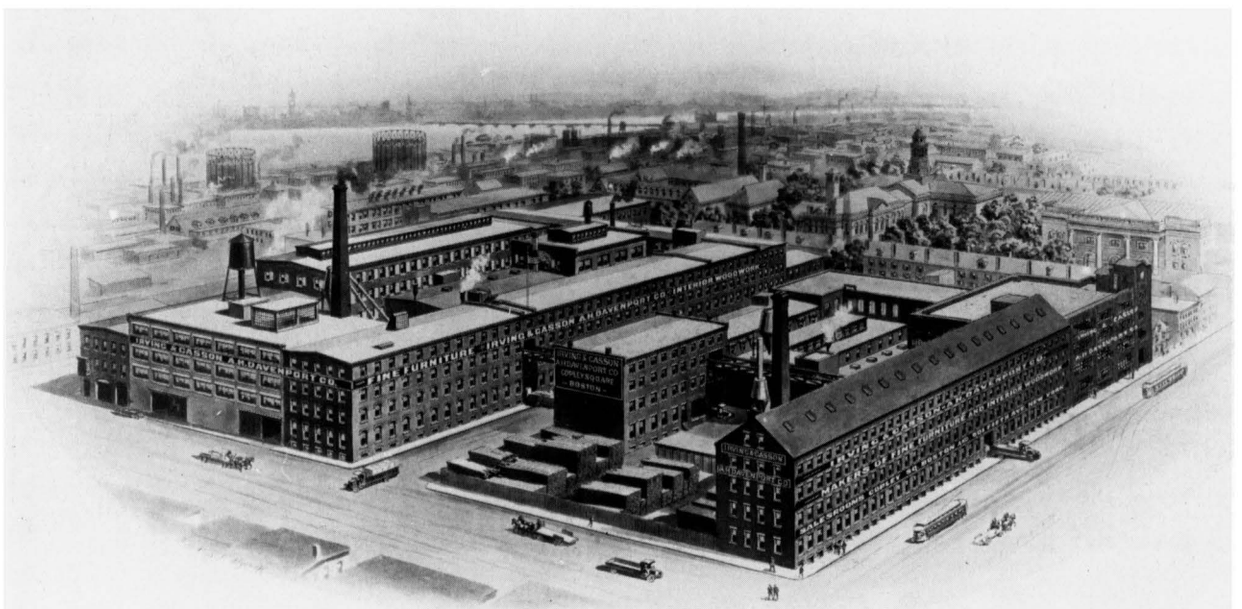
Davenport received a commission to make furniture for King Kalakaua's Palace in Hawaii in 1882, and in 1902 he furnished the interior of the White House as part of McKim, Mead & White's remodeling. Davenport's furniture for the White House was described as reproducing "patterns representing the best workmanship of colonial days." While other companies also supplied furnishings for this project, Davenport's contract was the largest and suggested the company's prominence.

Charles R. Irving and Robert Casson were first listed in the Boston directories in 1869, when they appeared separately as carpenters. They were listed as Irving & Casson for the first time in 1874, and their partnership continued until Irving's death, in 1925; Casson died in 1931. Beginning in 1882, they ran a factory in South Boston, and the following year they first advertised themselves as makers of wood mantels. They moved their factory to East Cambridge in 1885 and leased the west half of Woodbury's building on Otis Street, which had previously been occupied by Geldowsky. By 1890, they had taken over the first three floors of the building, which stretched 215 feet on Otis Street west of First (Fig. 386).

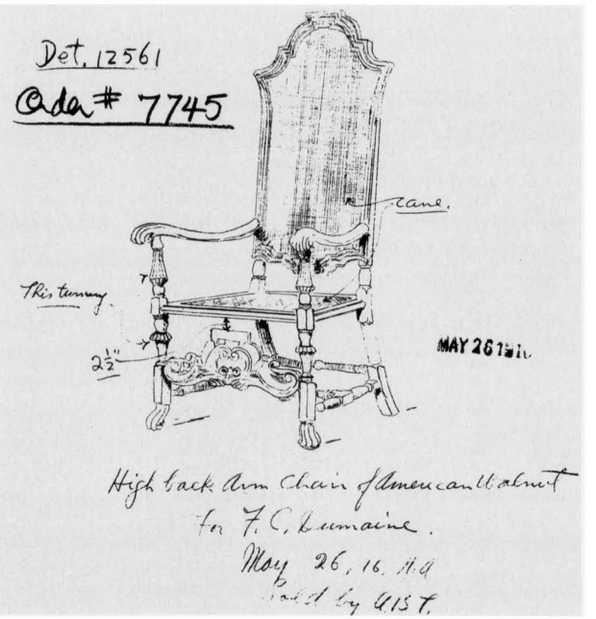
James Woodbury sold Irving & Casson all the land and buildings in the block between Otis, Thorndike, First, and Second streets (except for the houses on Second Street) in 1893. Although the purchase was subject to the leases of several other furniture companies, Irving & Casson gradually occupied more and more of the complex and, by 1895, had taken all four floors of 2–24 Otis Street. By 1896, it employed between 200 and 300 men, had a large Boston showroom, and did a substantial business all over the country.

The company began filling in the block with a four-story addition west of 2–24 Otis Street (Fig. 387) in 1897, and two years later put up another four-story building at 25 Thorndike Street. These new buildings were of brick and harmonized with the older factories on the site. Further expansion took place in the early 1900s, and in 1910 the company filled in the last gap in the complex with a four-story reinforced concrete building at 31–39 First Street between Otis and Thorndike streets. When Irving & Casson merged with A. H. Davenport in 1914, the combined company controlled almost the entire two blocks from Cambridge to Thorndike streets (Fig. 388).

Throughout this period, Irving & Casson advertised extensively as "manufacturers of wood mantels and interior finish," which became its specialties. Gradually it added such items as custom furniture, upholstery, and papier-mâché for ornamental work. In the 1890s, after it purchased the Otis Street factory, it produced "fine custom cabinet work, mantels, and interior finish for high class dwellings." The company's chief designer, John Muldoon, was the architect for East Cambridge's only Colonial Revival houses, 140–142 Otis Street and 41–43 Fifth Street, as well as the four-story addition at 26 Otis Street and two firehouses (see Figs 252, 311, and 312). Irving & Casson, like A. H. Dav-



388. Bird's-eye view of Irving & Casson–A. H. Davenport Company, c. 1925



389. Irving & Casson Company drawing of chair, 1916

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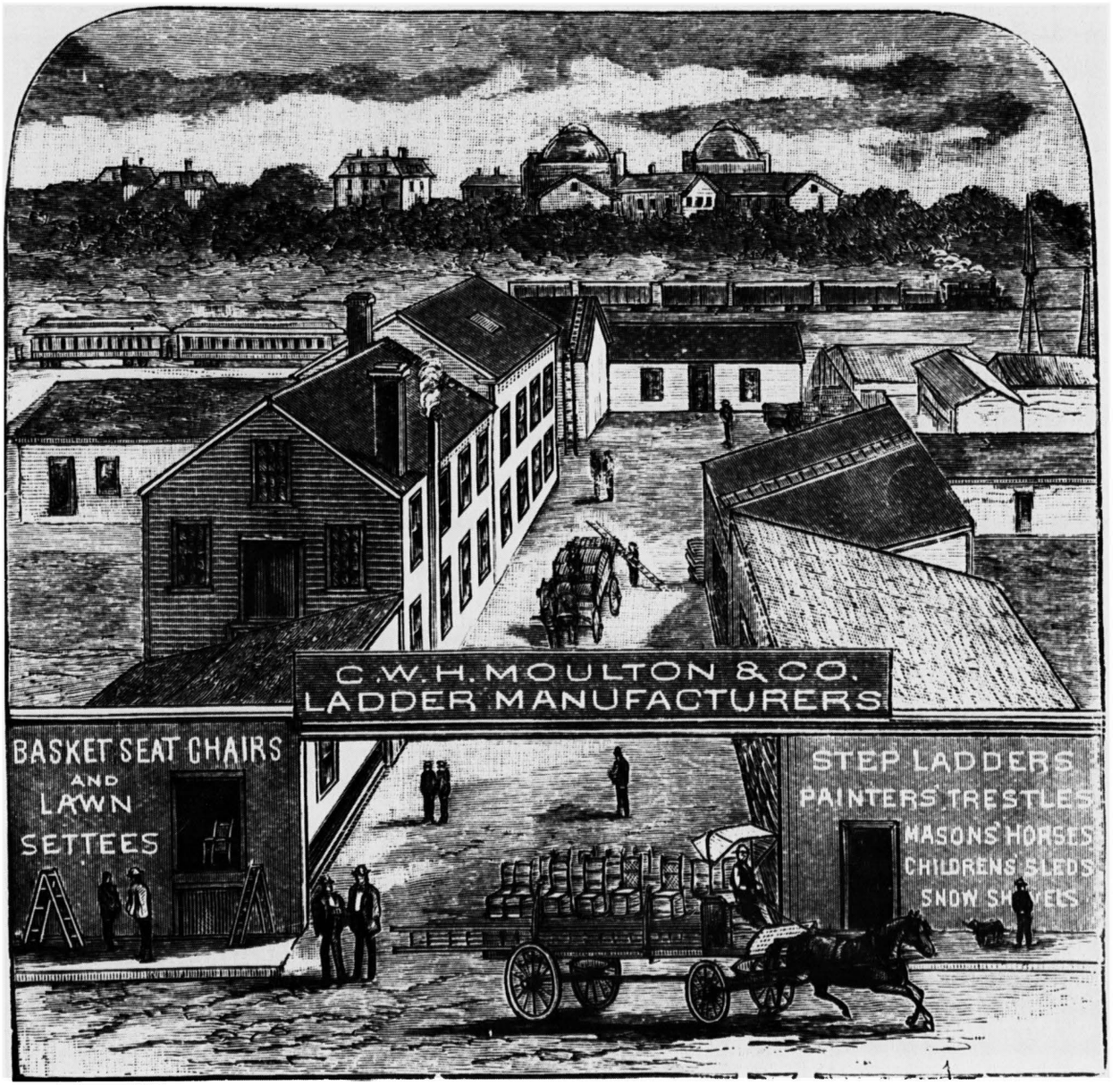
enport, thought of itself as a designer of interiors as well as a supplier of furniture.

After the turn of the century, Irving & Casson began to make church furniture, reflecting its alliance with the architectural firm of Ralph Adams Cram. After the company's merger with Davenport, its advertisement in the 1916 Boston directory read: "Irving & Casson–A. H. Davenport Company, Designers and makers of fine furniture and interior finish, decorations and upholstery, wall hangings" (Fig. 389). In the 1920s, it maintained a showroom in New York, which had been started by Davenport in the 1890s, and even operated an art gallery, to complete its service to the very rich in the halcyon days before the stock market crash. A major project of this period was a colossal reredos for St. Patrick's Cathedral in New York.

Business began to decline during the Depression. In the 1950s, the firm completed one of its last important commissions, the interior of the United Nations building in New York. Although the company continued to operate until the early 1970s on a smaller scale, its commitment to fine furniture was no longer profitable. Although the buildings were subsequently taken over by a designer and manufacturer of modern furniture, Charles Webb, the closing of the Irving & Casson–A. H. Davenport Company marked the end of East Cambridge's long history as a major furniture center. The Davenport factory on Cambridge Street has been occupied by the Deran Confectionery Company since 1936, while conversion of the former Irving & Casson factory to office space began in 1986.

Other Woodworking Companies

Other woodworking companies also settled in East Cambridge, and in 1873 all were north of Cambridge Street. The most closely allied with the furniture industry was a coffin manufacturer, William B. Lockhart & Company. Two companies on Gore Street near Squire's meatpacking plant, the Goepper Brothers barrel factory and the C. W. H. Moulton & Company ladder factory, were specialized firms not related to the furniture trade.



390. C. W. H. Moulton & Company, 139 Gore Street, c. 1892

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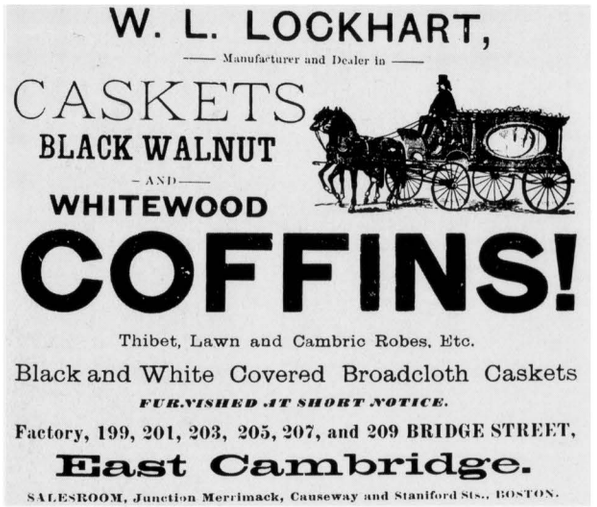
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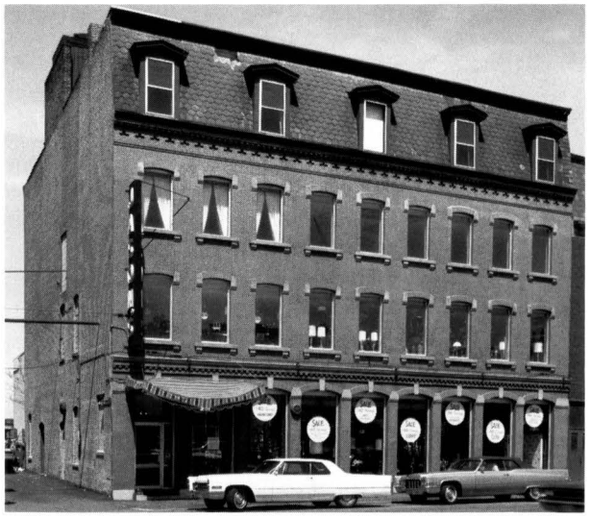
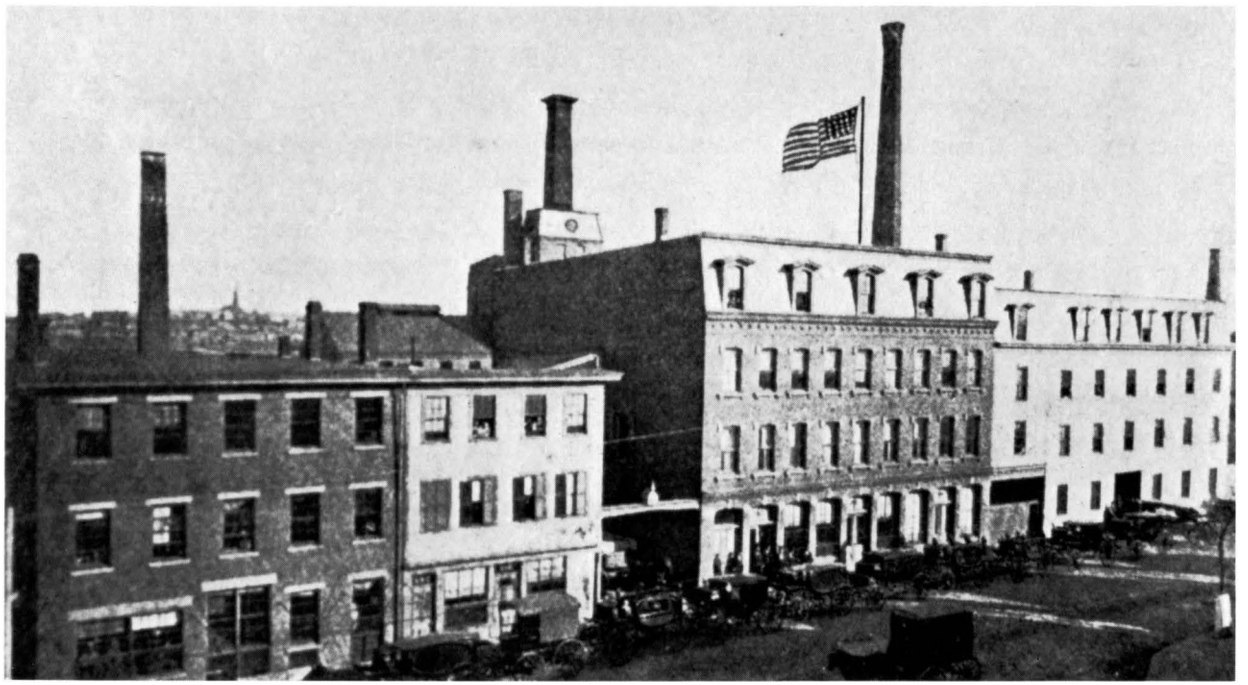
Black and White Covered Broadcloth Caskets
FURNISHED AT SHORT NOTICE.
Factory, 199, 201, 203, 205, 207, and 209 BRIDGE STREET,
East Cambridge.
SALESROOM, Junction Merrimack, Causeway and Staniford Sts., BOSTON.

391. Advertisement for William L. Lockhart & Company, 1889



392. William L. Lockhart & Company, 201 Msgr. O'Brien Highway, 1868. Photograph 1969



393. William L. Lockhart & Company, 1890

Moulton's, which advertised itself as the oldest ladder factory in America, made ladders at 138 Gore Street throughout the second half of the 19th century (Fig. 390). It began before 1847 and passed through several owners before it became the property of the Moultons in 1870. Under their ownership, the steam-powered factory remained fairly small, employing only 10 people in 1880. What the firm lacked in size, it made up in versatility; in 1889, it advertised that it also made

Step Ladders, Trestles, Window Jacks, Revolving Clothes Horses, Boy's Clipper Sleds, Snow Shovels, Carriage Jacks, Adjustable Ladder Hooks, Flag Staffs, Trellises, Lawn Settees, Basket Seat Chairs, Etc. (1889 Cambridge directory)

William B. Lockhart & Company

By far the largest woodworking company in East Cambridge outside the furniture industry was William Lockhart's coffin factory on Bridge Street (Fig. 391). Lockhart and his brother David purchased land along the wharves on the south side of Bridge Street just west of the Prison Point Bridge in 1854 and advertised themselves as coffin manufacturers, having been listed for the first time the previous year as cabinetmakers. Their choice of a site near the bridge followed the lead of the small independent cabinetmakers.

Born in Nova Scotia in 1827, William Lockhart apprenticed as a carpenter and worked with a coffin maker in Boston for four years before setting up his own business. He purchased his brother's interest in what had already become a profitable business in 1857, and continued to expand his line of coffins until 1860, when his building was destroyed by fire. Lockhart used the opportunity to expand, and with his friend Jacob Seelye purchased land on the north side of Bridge Street on the corner of Third Street. This lot included a three-story brick building (1859) that still stands at 209 Msgr. O'Brien Highway.

When he moved, Lockhart also branched into undertaking and soon put up a wood frame carriage house to accommodate his horses and hearses. Between 1864 and 1870, he gradually purchased the entire block on the north side of Bridge Street between Third and

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Water streets. His business grew steadily. He secured several patents for coffin designs, and in 1864 he was reported to be "doing a large business shipping coffins to Cuba" (Dun, Mass. vol. 49, p. 170). By 1868, he had erected a three-story brick office and showroom (now 201 Msgr. O'Brien Highway) (Fig. 392). This was his most elaborate building, with inset patterns in the cornice and a belt course above the first floor. By 1878, he had five principal buildings facing Bridge Street, employed 65 men producing 60 coffins a day, and had increased his power plant from 10 to 30 horsepower. In 1880, Lockhart had $150,000 invested in his company and 70 employees, making his the eighth largest firm in East Cambridge.

Lockhart's business had expanded sufficiently by 1888 to allow him to open showrooms in Boston. All manufacturing continued to take place in East Cambridge, where 150 men now made more than 250 styles of caskets using modern machinery, some of it invented by Lockhart himself (Fig. 393).

Lockhart & Company erected a new factory between First Street and the Lechmere Canal in 1902. In 1906, the firm was acquired by the National Casket Company, which expanded the factory several times and operated there until it was demolished in 1976 (see Fig. 71). The Bridge Street factory was sold to the Boston & Lowell Railroad in 1907, but all of Lockhart's buildings still stand. They now constitute the last remnants of East Cambridge's 19th-century industry north of Bridge Street.

Lockhart was also active in East Cambridge real estate. He sold some lots at 2–8 Water Street to William Boynton in 1878, under the condition that four dwellings be moved there from Bridge Street, presumably to provide housing for workers at the coffin factory. Half of the men who then lived there were furniture finishers and the other half were laborers. No other businesses in East Cambridge except Squire's provided housing for their workers.

In the 1850s, Lockhart lived with his brother at 402 Cambridge Street. He built an elegant mansard double house in 1869 at 390–392 Cambridge Street; its profusion of applied wooden ornament reflected his elaborate taste in coffins and befitted his position as a highly successful businessman (see Fig. 243). It seems appropriate that the house is now used as a funeral home. In spite of his involvement in East Cambridge, Lockhart did not live there for long. After 1878 he moved to Belmont, where he remained for the rest of his life.

Organ Building

Keeps constantly on hand finished, and ready for delivery, organs with one and two Manuals, with and without Pedal Bass, built from eight different Schedules, containing from four to twenty-two stops. Every organ warranted to be made from the best materials, and by experienced workmen, at prices from $350 to $1800 . . . we have kept our prices so low as to be beyond competition; and having now such incredible facilities and resources, we can produce superior instruments at shorter notice, and at more favorable prices, than can be obtained of any organ builder in the U.S.

This excerpt from Samuel S. Hamill's 1867 promotional pamphlet reveals the character of the organ building industry in East Cambridge: solid craftsmanship, reasonable prices, and available stock. Like furniture making, organ manufacturing in Cambridge was essentially an outgrowth of the Boston industry; while manufacturers there had cornered the metropolitan market by 1850, East Cambridge builders aimed at suburban, small town, and rural churches. The two major builders were George Stevens and Samuel Hamill, both of whom were known for their conservative small and medium-size church organs. Together, they sold organs throughout rural New England in the second half of the 19th century. Their factories were small and offered considerable hand craftsmanship, a contrast to Cambridgeport's larger, machine-oriented parlor organ and piano makers.

William Goodrich (1777–1833), the founder of both the Boston and East Cambridge organ industries, moved his Boston shop to Cambridgeport between 1808 and 1811 but settled permanently in East Cambridge in 1828 in a factory on the northwest corner of Fifth and Otis streets that included a complete metal organ pipe shop. Upon Goodrich's death in 1833, the

394–395. Organ by George Stevens, First Congregational Church, East Machias, Maine

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firm was taken over by two former employees, George Stevens and William Gayetty, whose partnership lasted until the latter's death, in 1839.

George Stevens (1803–92), born in Norway, Maine, and trained as a carpenter, bought Goodrich's factory and a large Greek Revival house in 1844 and soon became one of East Cambridge's major organ builders. By the second half of the 19th century, he had also become the most important manufacturer of conservative organs in the Boston area. His business increased steadily during the 1840s, and he produced organs for many small churches in Boston, Cambridge, and rural areas up and down the East Coast (Figs. 394–395). Local examples include organs at St. Mary's Church in Boston and Christ Church in Cambridge.

In the late 1840s and 1850s, Stevens also became active in Cambridge affairs, serving as alderman four times, mayor in 1851–52, and as an incorporator and president of the East Cambridge Savings Bank. He built a new factory on Bridge Street in 1853, but later rebuilt on the original Fifth Street site after fires in 1860 and 1876. Although the factory gradually expanded to include an additional building on the southwest corner of Fifth and Cambridge streets, his firm remained small, employing only 4 full-time workmen in 1880. No list of his work has survived, but Stevens is known to have built more than 800 organs. He retired in 1892 and was succeeded by 2 employees, James Gilbert and George Butler, but the new partnership lasted less than a decade, and the firm closed in 1902.

Stevens' brother William (1808–96) also participated in East Cambridge's organ trade, but to a much smaller extent. After working for his brother for several years, William began his own firm with James Jewett and Horatio Davis. After a brief period on Cambridge Street, the trio moved their operation to George Stevens' recently vacated Fifth Street factory in 1853 and seemed to thrive. But by the early 1860s business had declined. His partners left the firm, and in 1866 William Stevens moved his factory to Boston, where he remained until 1871.

S. S. HAMILL,
Manufacturer of
CHURCH ORGANS
OF EVERY SIZE AND DESCRIPTION.
Estimates given on every size church organ. Repairing and Tuning promptly attended to.
Manufactory and Office, Bent Street, near Sixth St., East Cambridge, Mass., one mile from Boston.

396. Advertisement for S. S. Hamill, 1893

397. S. S. Hamill's organ factory, 101–103 Gore Street. Photograph c. 1875

398. Employees of S. S. Hamill at the factory, c. 1875

Samuel S. Hamill (1830–1904) was the other major East Cambridge organ manufacturer. Trained in New York and possibly Boston, he began his East Cambridge operation in about 1861. His instruments, shop, and clientele were very similar to George Stevens', but Hamill advertised more frequently and built organs for churches in a wider geographic area, including upstate New York, Iowa, and as far away as Cuba (Fig. 396). His output included an organ for the Second Universalist Society in Cambridge. In an 1867 catalogue, Hamill boasted that he employed no apprentices, only thoroughly experienced organ builders; that he used only the best materials; and that his firm also made metal organ pipes. Hamill's later organs were known for their rather "loud" tone. An 1870s photograph shows his simple, domestically scaled Greek Revival factory at 101–103 Gore Street (Figs. 397–398). In 1880, Hamill's firm employed 6 full-time employees to Stevens' 4, and he had invested more capital: $8,000 compared to Stevens' $2,000. Hamill's factory moved to Bent Street near Sixth in 1892, but production ceased soon afterward.

Nineteenth-century organ manufacturing in East Cambridge was in direct contrast to that in Cambridgeport, where George Woods & Company and the Mason & Hamlin Organ & Piano Company specialized in cabinet or parlor reed organs instead of pipe organs. The Cambridgeport firms operated on an industrial scale, employing 160 and 340 men respectively in 1880. Both communities also had firms that produced related components, such as Somerby & Paine, an organ pipe maker, which operated from 1869 to 1873 at the corner of Second and Gore streets. An organ action maker and two organ stop manufacturers were located on Broadway.

Other Industries

A variety of other industries — sugar, oiled clothing, brushes — were also attracted to East Cambridge, settling north of Bridge Street or in the vicinity of Thorndike and Spring streets near the Charles River.

In 1871, the Revere Sugar Company located on Water Street just north of Bridge Street, adjacent to

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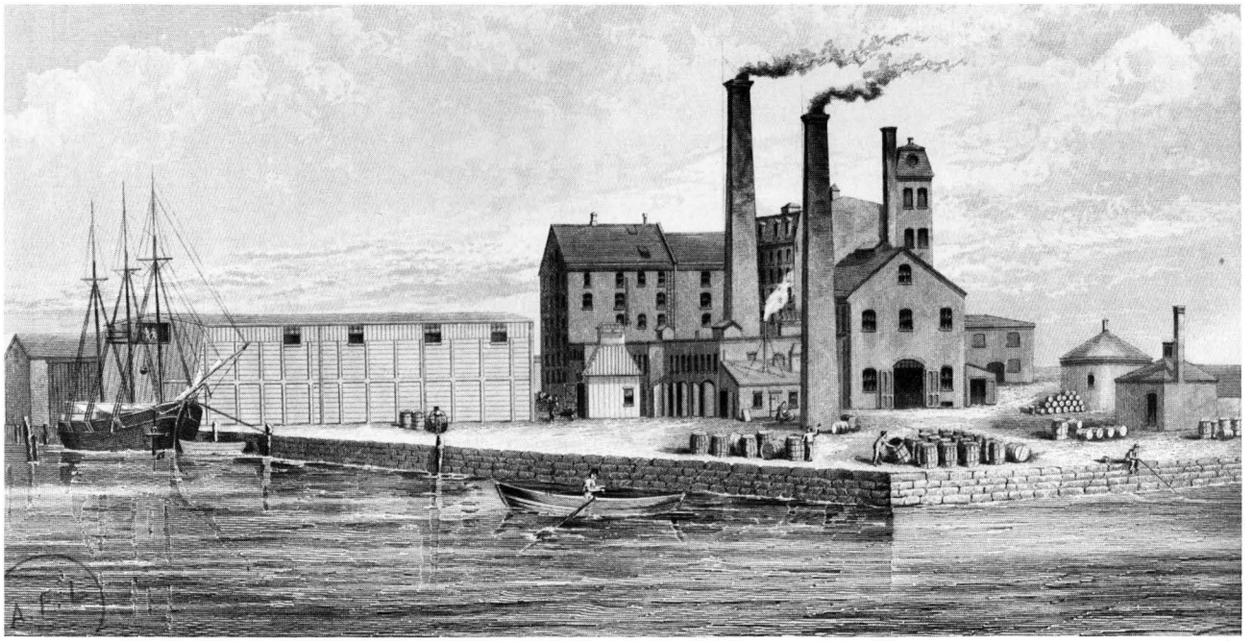
the New England Glass Company (Fig. 399). The Eagle Refinery had purchased the highly successful Winchester soap factory in 1868 and converted it to refining sugar, but Eagle soon went bankrupt and Revere took over the plant. The new owners, Nash, Spaulding & Company of Boston, made extensive additions, upgrading its machinery and greatly increasing its capacity. By 1896, Revere Sugar was on a solid footing, employing 130 men and producing 1,400 barrels of refined sugar a day. It continued to be a major industry in East Cambridge until 1918, when it moved to a site on the Mystic River in Charlestown. The square-towered main building was used by the Johns-Manville Company as an asbestos warehouse and remained on the skyline until the 1940s. Even after Revere Sugar moved, its barrels continued to be made in the old Goepper Brothers factory on Ninth Street.

The factory of W. H. Pettingell and H. M. Sawyer, originally Pettingell & Blodgett, operated for over a century. This firm was established in East Cambridge in 1840 by William H. Pettingell and David Blodgett and made waterproof hats and suits for sailors and fishermen. The material was canvas soaked with linseed oil, and the suits were unpopular at first because the oilcloth did not dry completely. In 1856, H. M. Sawyer joined the company and in 1860 became a partner. After the Civil War, the oilcloth process was perfected and waterproof clothing became popular for miners and lumbermen as well as fishermen. The firm operated as Pettingell & Sawyer until 1868, when it incorporated a rival firm and became Pettingell, Moody & Sawyer until 1877. It became H. M. Sawyer & Son in 1895.

The company's original wooden factory at 20 Thorndike Street, on the corner of Second, was destroyed by fire in 1877. The main building was soon rebuilt, and the firm gradually expanded to occupy several other wooden buildings in the block bounded by Thorndike, Spring, First, and Second streets. By 1891, business had increased so much that several sizable additions were built. Surprisingly, given the danger of fire, all this construction was still in wood. The first fireproof building was a five-story reinforced concrete structure at 72 Second Street (1907), used to oil and dry water-



399. Revere Sugar refinery, Water Street, 1876

400. H. M. Sawyer & Son, 72 Second Street, 1907, Eastern Expanded Metal Company

STRATTON, SHERRIFF & CO.,
BRUSH MANUFACTURERS,
No. 22 Exchange Street, Boston.
Brushes of every description, at wholesale or retail. If not on hand, made to order at the shortest notice, at their Manufactory, and warranted of the first quality. Also, sole manufacturers of
Taylor's Patent Dresser Brushes,
Bristles and Brushmakers' Findings.

401. Advertisement for Stratton, Sherriff & Company, 1849

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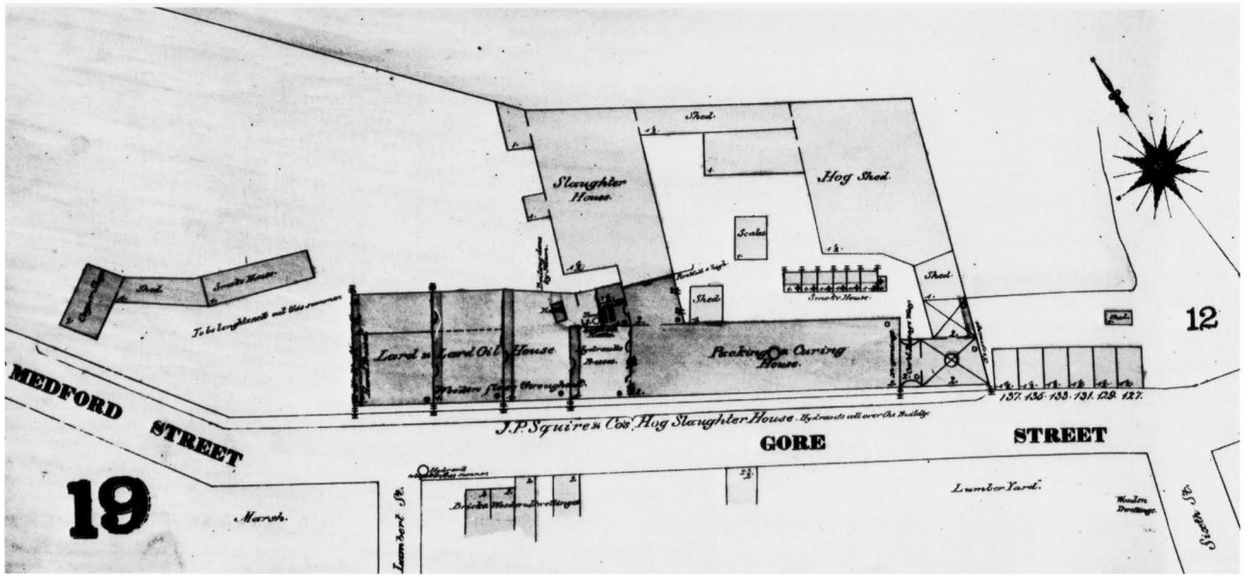
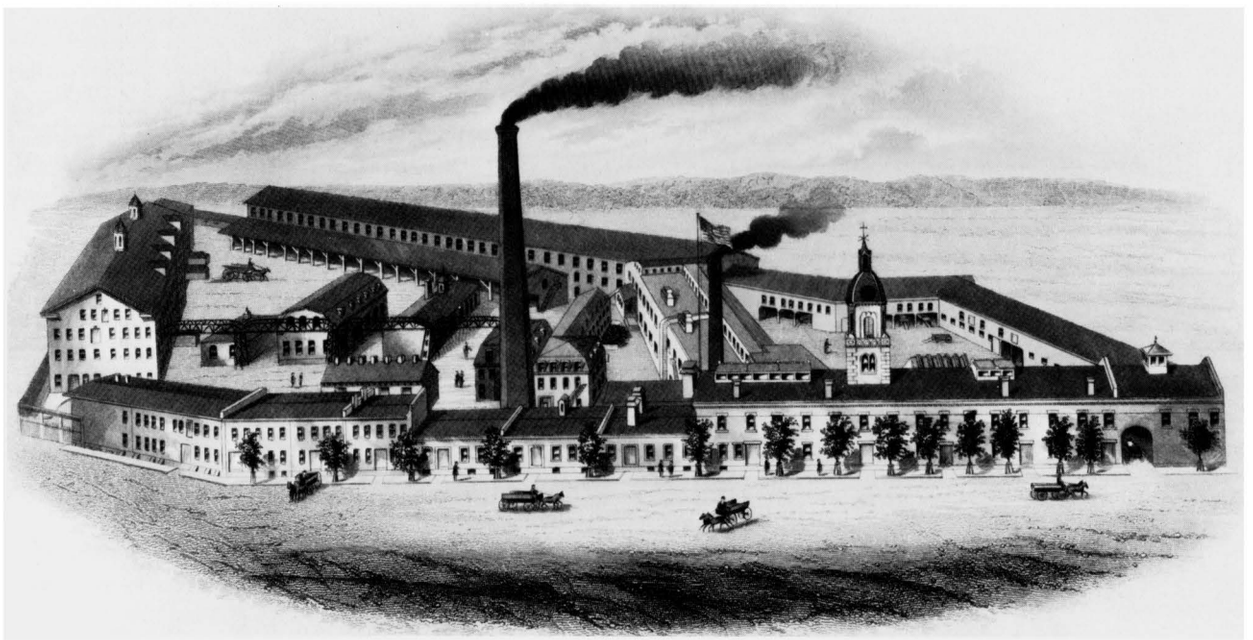


402. Plan of John P. Squire & Company, 1868



403. John P. Squire & Company, 1876. Office, packing and curing house, right center foreground; hog house, left rear

proof cloth (Fig. 400). Unfortunately, this building — the earliest and most significant concrete factory remaining in East Cambridge — was demolished in 1986 to make room for a city parking garage.

For much of the 19th century, brushmaking was a major industry in East Cambridge. Individual brushmakers had been at work since the early 19th century. By the 1850s, Stratton, Sherriff & Company on South Third Street employed 150 persons and had developed into one of East Cambridge's larger manufacturers (Fig. 401).

In the 1860s, three firms were in operation, but in 1861, Middlesex County began brushmaking at the house of correction. Initially, private brushmakers were contracted to manage the operation, but in 1862 the county began to compete with them. By the 1880s, over 200 inmates produced almost $70,000 worth of medium-quality shoe, stove, and scrub brushes a year. The county gradually drove the private firms from the field; only two were operating in 1874, and one remained in 1880. Although the legislature reduced the number of inmates allowed to work on brushes to 50 in 1891, by then the last private brushmaker in East Cambridge had closed its doors.

Meatpacking

But a slaughter-house, thronged with grimy, coarse-looking men, from within which arise the bellowings and piercing cries of terror-stricken animals, where the floors are drenched and the walls spattered with blood, where greasy odors impregnate the air, and the horns, hides, bristles, hoofs, and entrails of dead creatures are lying about — we do not wish to hear of that.

Cambridge Chronicle, December 5, 1874

The meatpacking industry that became so important in the late 19th century was an activity, like glass and furniture manufacturing, that found East Cambridge's proximity to Boston a decisive factor. Densely settled, Boston had no large, isolated areas where such noxious industries could safely operate; East Cambridge offered not only an inexpensive, spacious location but the

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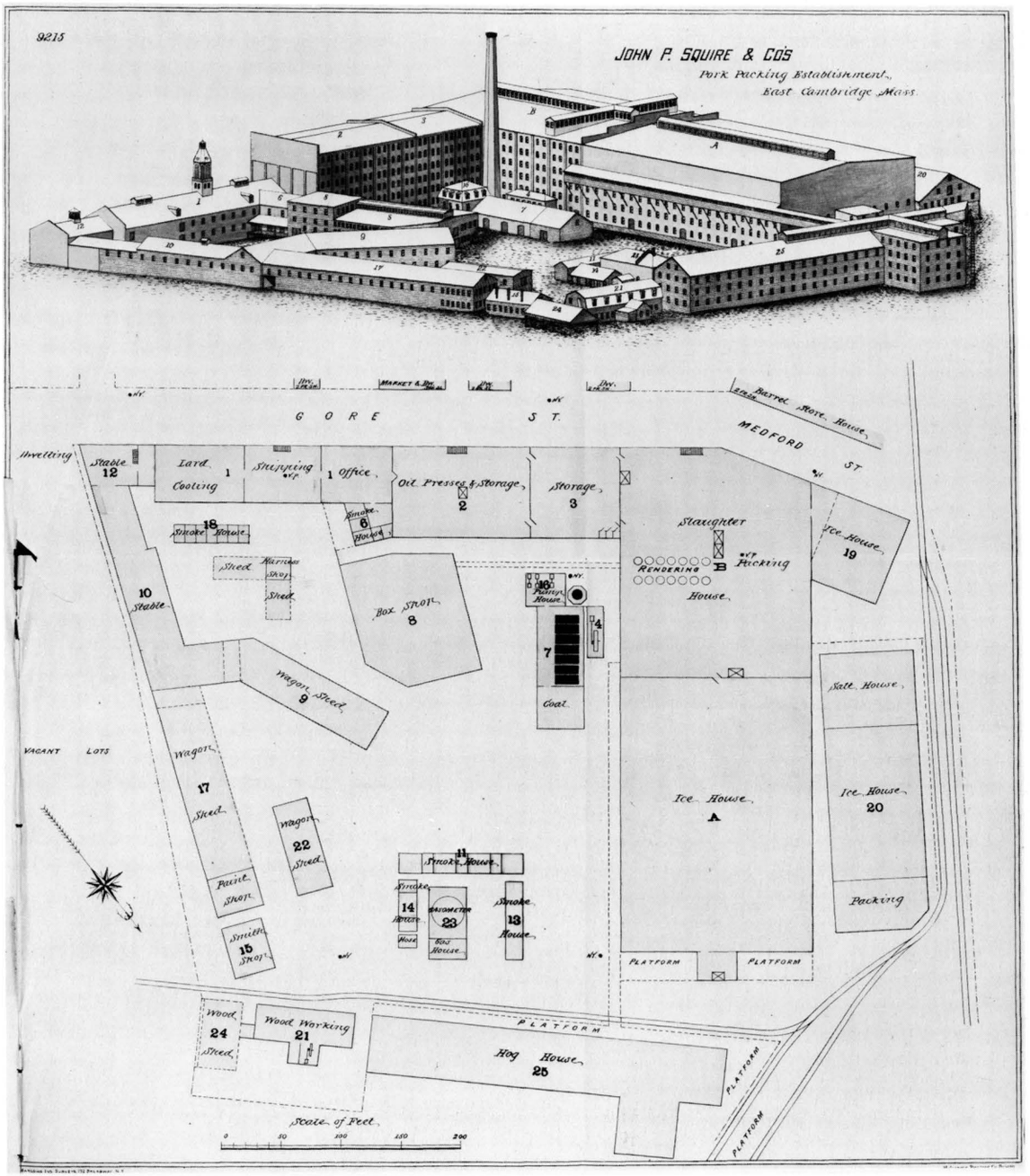
seeming advantage of easy waste disposal in the tidal waters of the Miller's River. The site was served by the Grand Junction and Fitchburg railroads, both of which offered connections to rural New England and the West. By the 1870s, nine packinghouses had been established on the river, seven of them upstream in Somerville.

At its peak in the 1890s, John P. Squire's pork packing business occupied 22 acres on Gore Street and employed a thousand workers; it was by far the largest industry in East Cambridge and one of the largest in the Boston area. The company was founded and operated for nearly half a century by Squire himself, who was born in Vermont in 1819 and entered the provision business in 1838 as an employee of Nathan Robbins in Faneuil Hall Market. Squire and Francis Russell started their own business, Russell & Squire, at the same location in 1842. It continued until 1847, when Squire assumed sole control.

Squire decided to expand and purchased land in East Cambridge in 1855. Taking into partnership Hiland Lockwood and Edward D. Kimball, he formed John P. Squire & Company and set up a slaughterhouse between Gore Street and the Miller's River, straddling the Cambridge-Somerville line. After ten years, Squire & Company was taxed for a slaughterhouse, stables, and sheds valued at $20,000 on a 50,000-square-foot lot valued at $10,000. At first it was a small operation that slaughtered only one hog a day. Squire later reminisced that when he slaughtered 25 a day he thought he was on his way to success.

Expansion began in 1866 and 1867, when, according to Cambridge tax records, the value of the slaughterhouse increased by 25 percent to $25,000, and the value of his stock in trade increased by over 300 percent to $47,000. Squire also started buying additional land nearby, including a 35,000-square-foot tract on the south side of Gore Street between Seventh and Lambert streets. There, in 1867, he erected three rows of houses containing nineteen units, to be rented to workers (see Fig. 452).

By 1868, Squire's had become a substantial complex of one- and two-story buildings (Fig. 402). The main building along Gore Street contained the offices, as



404. Plan and view of John P. Squire & Company, 1887

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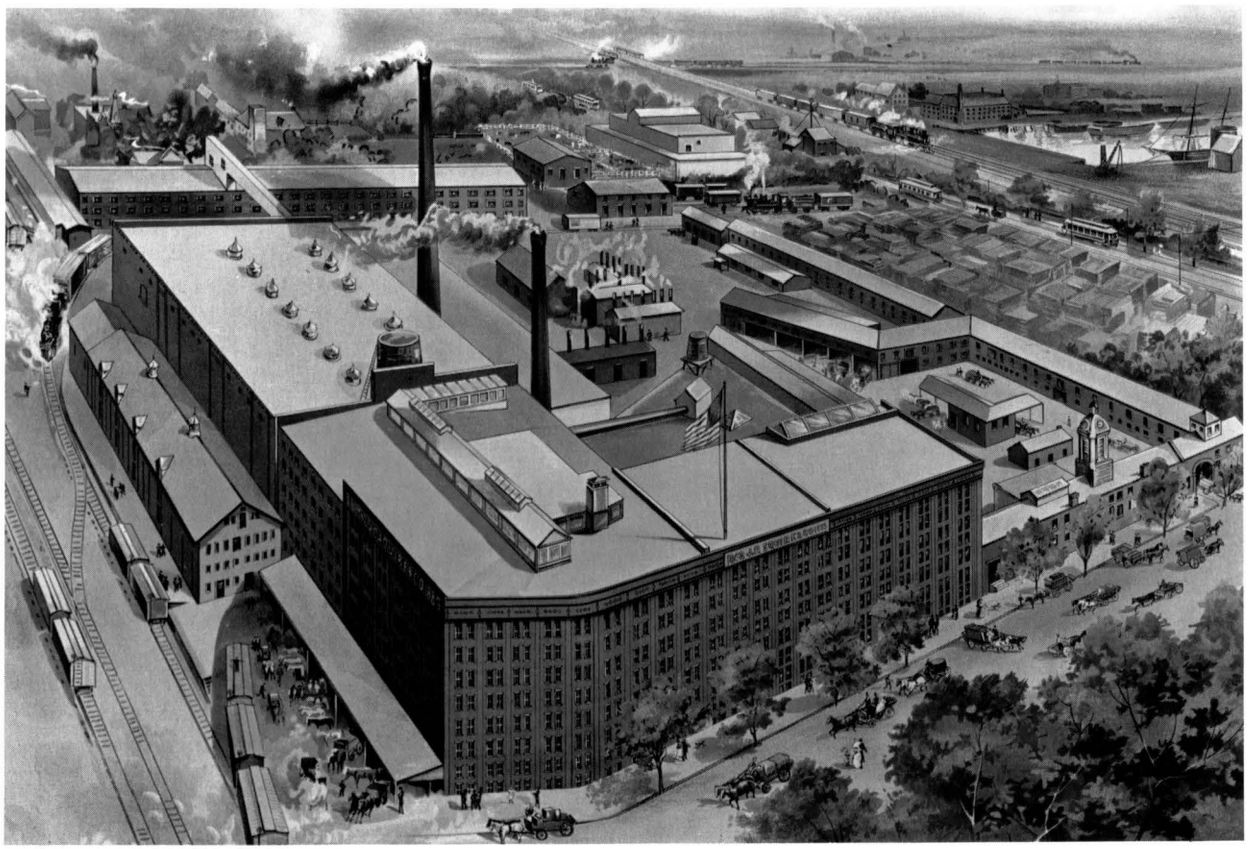
well as the packing and curing operations. The slaughterhouse and hog shed extended over the Miller's River. Other structures included two smokehouses, a lard oil house, a cooper's shop, and a weighing shed. A clock tower was added to the main building in 1873, when Squire's was being accused of polluting the river. Seen as a gesture to the public, it became a landmark that survived until 1963.

At this period, Squire's employed 330 people in a complex whose buildings alone occupied 3 acres; it owned an additional 8 acres along the river. The covered pens held 7,000 swine, and annual production reached $3 million. Squire's paid up to $40,000 in freight charges each month and furnished one third of the Cunard Line's cargo from Boston to Liverpool.

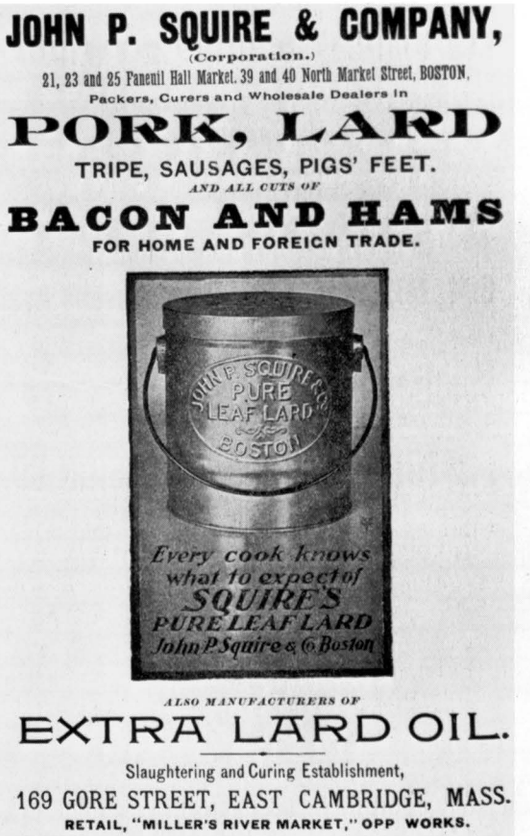
The *Chronicle* described the magnitude of the operation in 1874 (Fig. 403). Every day, 60 to 120 carloads of hogs from Chicago and points west arrived by train at Squire's yard and hog shed, "a great three-storied house" with ramps connecting each story. Between 1,500 and 1,800 hogs were killed each day in a process whose waste included vast quantities of blood, scalding water in which bristles and skin were removed, and entrails. The carcasses were butchered, cooled, cured, and smoked, salted, or pickled, depending on the product.

The icehouse held 8,000 tons of ice, used to refrigerate the pork while it was curing. Lard was rendered and then chilled, and hydraulic presses extracted 20 to 30 barrels of lard oil a day. The rendering produced noxious odors, but by 1874 the lard was being processed in steamtight vats, and the gases were condensed and purified without reaching the open air.

By 1880, the company was slaughtering more than 350,000 hogs each year. According to the 1880 census, more than 400 employees worked ten-hour days at wages ranging from $1.25 per day for an "ordinary laborer" to $2 per day for a "skilled mechanic." A four-story brick slaughterhouse and a five-story icehouse



405. John P. Squire & Company, c. 1895


JOHN P. SQUIRE & COMPANY,
(Corporation.)
21, 23 and 25 Faneuil Hall Market, 39 and 40 North Market Street, BOSTON,
Packers, Curers and Wholesale Dealers in
PORK, LARD
TRIPE, SAUSAGES, PIGS' FEET.
AND ALL CUTS OF
BACON AND HAMS
FOR HOME AND FOREIGN TRADE.
JOHN P. SQUIRE & CO. PURE LEAF LARD BOSTON
Every cook knows what to expect of SQUIRE'S PURE LEAF LARD John P. Squire & Co. Boston
ALSO MANUFACTURERS OF
EXTRA LARD OIL.
Slaughtering and Curing Establishment,
169 GORE STREET, EAST CAMBRIDGE, MASS.
RETAIL, "MILLER'S RIVER MARKET," OPP WORKS.

406. Advertisement for John P. Squire & Company, 1899

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407. John P. Squire & Company, 169 Gore Street. Photograph 1946

were added in 1881. A five-story brick block, designed by Albert Currier of Newburyport, replaced most of the complex's frontage on Gore Street in 1885 (Fig. 404). By 1887, Squire's had 750 hands, nearly twice the work force of seven years earlier, and was slaughtering 2,500 hogs daily.

After a fire in 1891, a De La Vergne refrigeration system replaced 25,000 tons of ice and allowed for a more efficient use of space. The rebuilt hog house, also designed by Currier, had space to hang 12,000 hogs. At the same time a 230-foot chimney, a boiler room with eight immense boilers, and two 150 horsepower engines were added. Just a few months later, the *Arlington Advocate* described Squire's as the largest hog packing company under the control of one family, and in 1896 it was called the third largest such company in the country.

John P. Squire died on January 7, 1893, eight months after the company was incorporated, and his sons, Frank O. and Fred F. Squire, took over. Three years later, Squire's employed 1,000 men, slaughtered 2,500 to 4,000 hogs daily, and grossed $16 million. It owned 22 acres in East Cambridge and Somerville, 14 of which were occupied by buildings (Fig. 405–406). However, the company suffered serious financial difficulties under the sons' direction and was reorganized in 1899 to give them a diminished role. In 1903, the directors removed John P. Squire's sons and grandson from the board altogether.

Squire's eventually became part of Chicago's Swift & Company. Swift first appeared in East Cambridge in about 1915 when it bought land from Squire's and built an oleomargarine factory at 188 Gore Street. In the mid-1930s, Swift took over the Squire plant across Gore Street, continuing its operation for about twenty years (Fig. 407). The vacant complex was destroyed in a dramatic fire in 1963.

The Miller's River Controversy

We know of no territory of equal extent within the borders of Massachusetts in so foul and so dangerous a condition, and none in which so virulent forms of epidemic disease, if ever introduced would be likely to commit such ravages as in the Miller's River District and its immediate surroundings.

Fifth Annual Report of the Massachusetts State Board of Health

Sanitary problems in and around the Miller's River, described so vividly by the Board of Health in 1873, were caused by neglect and overuse on the part of the factories and cities that adjoined it. Until it was filled in 1874, the Miller's River extended along the border between Cambridge and Somerville as far as Union Square. Bridge and Gore streets divided the estuary into two shallow basins. Sewers in both cities emptied household waste into the river, but the major polluters were the nine slaughterhouses that had settled on its banks by the 1870s. All relied on the inadequate flushing action of the tides, which deposited waste on the flats where it was exposed at low tide.

Complaints by the citizens of Cambridge, Somerville, and Boston that their health was being adversely affected by the water and air pollution from the Miller's River prompted the General Court to establish the Massachusetts Board of Health in 1869. The board's first job was to investigate the meatpacking industry and the Miller's River nuisance. It examined the nine slaughtering and meatpacking houses on the river and their methods for disposing of the blood and organic waste of more than 500,000 slaughtered hogs each year (Fig. 408). Its main target was Squire's, the largest firm, which had been discharging waste into the river since 1855.

The board's first report observed that while the population had grown, precautions for the maintenance of health had not, and land that had been vacant when the offensive trades were established was now being populated. Nuisances, the report stated, "cannot exist in our midst without depriving somebody of what he has an inherent right to enjoy." While the board recognized the rights of the citizens to a healthy environment, it also acknowledged the competing private interest in Squire's right to operate a business without government interference. The attempt to resolve this conflict between private and public interest led to a major and unprecedented extension of the state's authority.

In 1870, the Board of Health successfully lobbied the legislature to pass "An Act Concerning the Slaughtering Houses and Noxious and Offensive Trades," giving the board authority to close any industry that endangered the public health. Under the new act, the Cambridge and Somerville boards of health petitioned the state board to close Squire's and three Somerville meatpacking plants. The petition was dropped, however, when the board scheduled a hearing.

The City of Cambridge attempted to rectify the problem of the accumulating waste in 1871 by building a dam along Bridge Street across the river at the eastern edge of the lower (or Squire's) basin. The dam was expected to flood the basin where much of the effluent had collected. Instead, it exacerbated the situation by allowing the putrifying organic matter to stagnate. Within a month the dam was removed, and in July 1871, the two cities appealed to the Board of Health for relief.

The General Court passed an act in 1872 charging a joint commission consisting of the Board of Harbor Commissioners and the Board of Health with devising a plan to abate the nuisance. The mayor of Cambridge petitioned the commission to fill the Miller's River, and an attorney representing Squire's responded that Mr. Squire had settled there to secure fresh air and open space and that any claim that he wanted use of the water for sewage disposal was false. While he agreed

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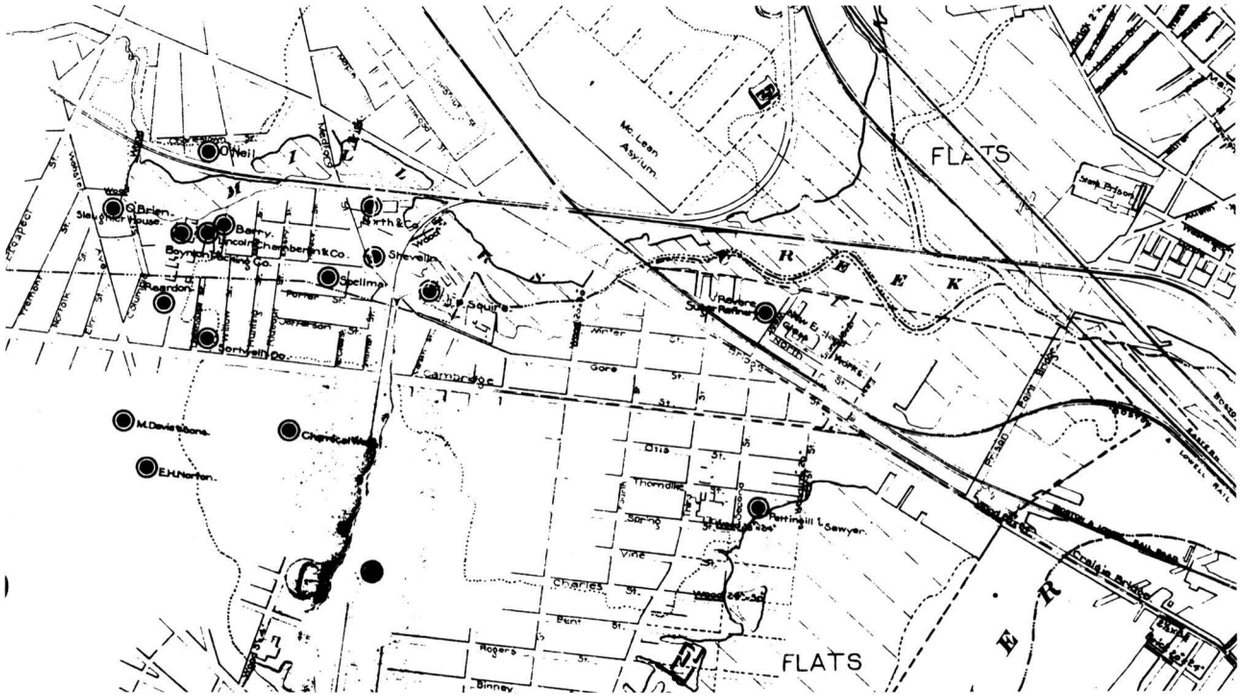

408. Sources of pollution in the Miller's River, 1873

that a nuisance existed, the attorney claimed that Squire's was not to blame; rather,

the difficulty is in the neighborhood, in the people who inhabit the tenement houses about there and who are allowed to throw their filth upon the ground or into the basins of Miller's River. The difficulty is in the want of proper sanitary and police regulations, and of a system of scavenging over the district; and I want to know if that evil will not be increased if you fill up these basins and make solid land there, which will be occupied by the same class of population as now live upon their borders? (Muzzey, March 20, 1872, p. 8)

Later, Squire's attorney claimed that the economic interests of Massachusetts would be adversely affected were the board to recommend the filling of the Miller's River. He emphasized that the packing companies had generated $60 million worth of business for the port of Boston and had created jobs for a thousand families.

The final report of the joint commission was published in December 1872; it expressed "the need of some comprehensive and harmonious system for the drainage of the whole Metropolitan District" and suggested that the Miller's River problem was representative of trouble facing other communities in the Boston area. It concluded that the Miller's River basins were used as receptacles of sewage from Cambridge and Somerville; that due to the shallowness and narrow outlets of the basins they collected permanent deposits of insoluble animal matter; and that the slaughterhouses were the primary source of the problem. The commission recommended that the cities of Cambridge and Somerville fill "all the channel, flats, and basins of Miller's River lying east of Prospect Street in Somerville, and southwest of the Boston & Lowell Railroad."

However, no action was taken, and almost a year later the Board of Health invited the interested parties to discuss another solution. The board proposed that the slaughterhouses be relocated to an abattoir as was then proposed for Brighton, but the companies rejected the suggestion.

In August 1873, the Somerville Board of Health registered complaints from "citizens living in that vicinity . . . that on several occasions during the nite-time an intolerable stench had invaded their homes, causing immediate sickness in their families." Some complained that the fumes had discolored the paint on their houses. On August 2, the *Chronicle* also reported that "silver door plates are said to turn black, and silver spoons in the houses to become tarnished in a single night from the . . . foulness of the atmosphere." In September, a committee of East Cambridge citizens urged the Board of Health to close all nine slaughterhouses.

A hearing in December 1873 lasted a month, with two weeks devoted to the Squire case alone. The outcome was disappointing. No recommendation was made to close the slaughterhouses, although the board did recommend that an abattoir be chartered by the legislature. The board also failed to make a finding against specific companies, claiming that it was impossible to attribute the origin of the pollution to individual establishments.

While the petitions against the slaughterhouses and meatpackers failed, in 1874 the two cities built sewers and filled in the basins themselves. The hearings focused scientific attention on the issue and resulted in improvements in the slaughtering process. At the same time, technological advances, such as mechanical refrigeration and more efficient transportation, mitigated some aspects of the problem.

The benefits of these investigations were felt beyond Cambridge and Somerville. Legislation passed to address the situation in East Cambridge set precedents and provided relief for other cities and towns in Massachusetts. Studies of stream pollution and abatement were first conducted in connection with the Miller's River nuisance. In the words of a recent text, to Massachusetts "must be assigned the credit of not only first taking up the subject systematically but of materially advancing accurate knowledge of the subject."

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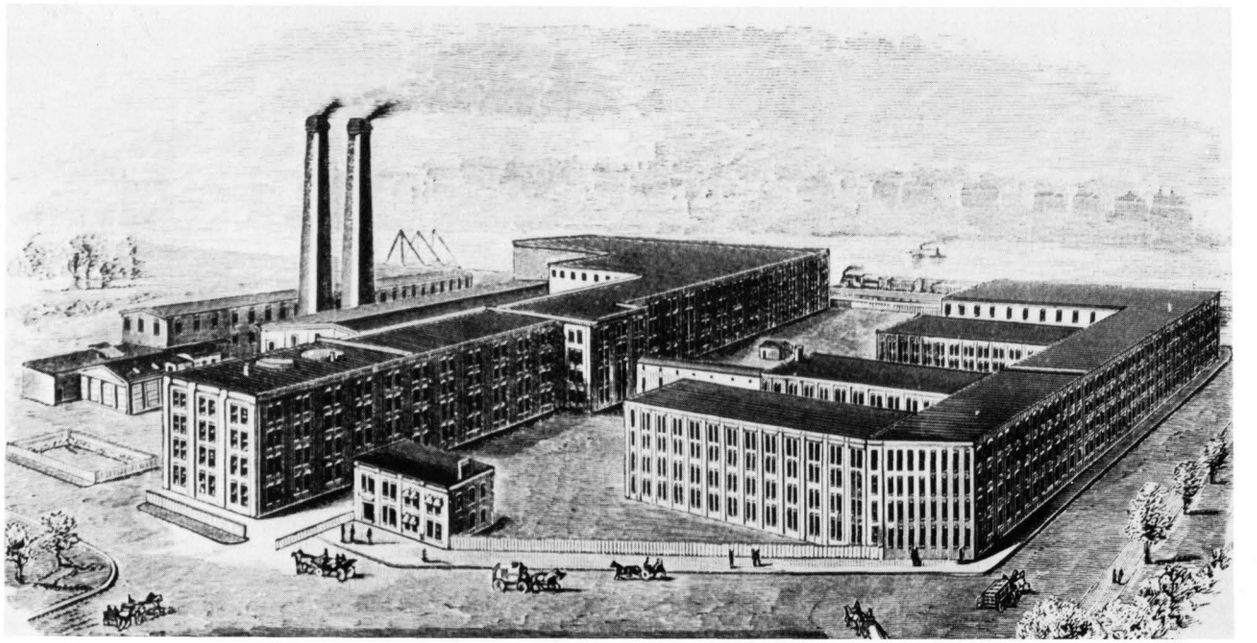
Industrial Development South of Charles Street, 1870–1914

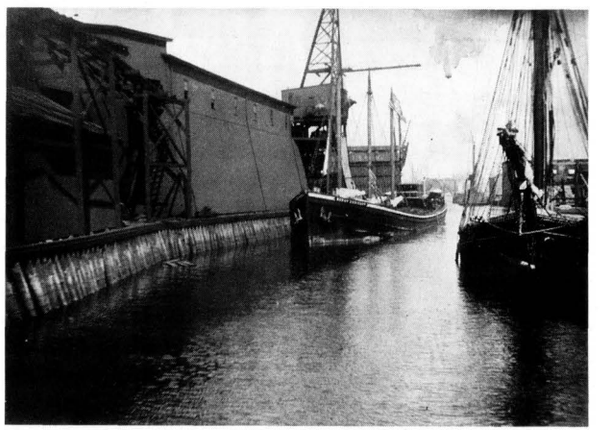
In the last quarter of the 19th century, the area south of Charles Street to the Broad Canal was developed by heavy industries that required rail transportation. Progress depended on filling marshland and providing access to the Grand Junction branch of the Boston & Albany, although a few factories had wharves on the river before the frontage was taken by the city in 1895. The oil manufacturers, machine shops, foundries, and the like that located there were generally Boston firms attracted by the large, reasonably priced sites set apart from residential areas. The nature of these industries and their concentration discouraged the construction of housing nearby.

The American Net & Twine Company was an established Boston firm that moved to East Cambridge in 1875. Founded in 1844, it was the first in the United States to manufacture cotton fishnets; previously, nets and twine were made of hemp and imported from England. Installed in a new three-and-a-half story brick building with a distinctive gambrel roof at 222 Third Street, this highly mechanized factory, described in 1896 as a "model of convenience," used the most modern equipment and initially had its own wharf on the Charles River. Three-story, flat-roofed additions of conventional mill construction were built in 1886 and 1916. The company ceased operations and the buildings were sold in 1928 and rehabilitated for offices in 1982 (see Fig. 80).

Other industries settled on the north bank of the Broad Canal, which had remained undeveloped, even though the south bank had been a commercial district



409. American Rubber Company, Potter and Binney streets, 1896



410. Cambridge Gas Light Company collier *Henry Endicott* in the Broad Canal, c. 1900

411. Third Street looking north from the Broad Canal. Cambridge Gas Light Company building, 1872, with addition by H. D. Joll, 1900, right; Boston Stamping & Manufacturing Company building, c. 1870, left. Photograph 1945

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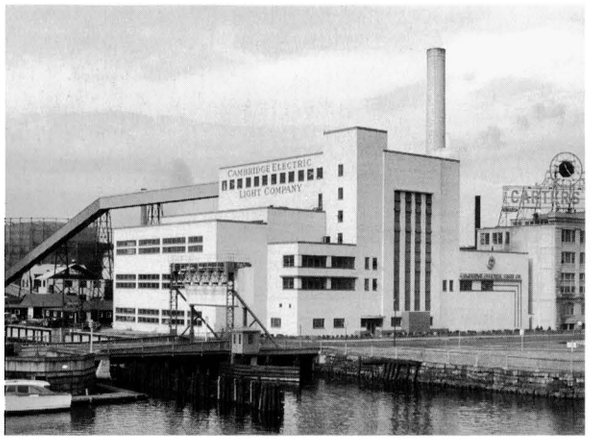
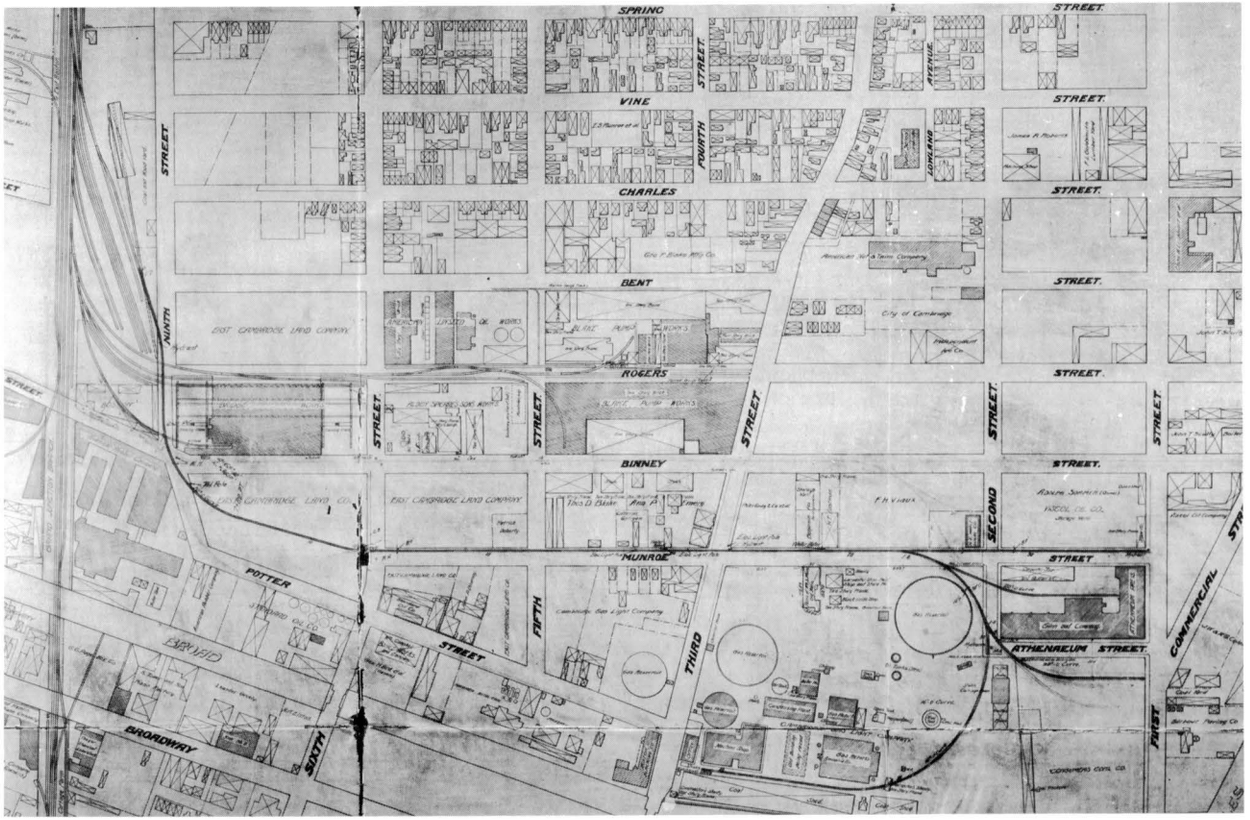
412. Cambridge Gas Light Company stable being moved to its present site at 40 Athenaeum Street. Photograph 1905



413. Cambridge Electric Light Company, Kendall Station, 265 First Street, 1947–49, Gilbert Associates. Photograph c. 1950



414. Rogers and Munroe streets industrial tracks, 1908

since the 1840s. Both the Cambridge Gas Light Company and the American Rubber Company moved here in the 1870s (Fig. 409). They depended on ocean shipping, the gas company for coal and the rubber company for raw materials. Both later gained access to the Boston & Albany through private spur tracks.

The Cambridge gasworks was originally located near Harvard Square, but in 1871 a new complex was constructed on Third Street by the Broad Canal. Growing demand led the company to develop the site into an extensive coal gas manufacturing plant, covering most of the area between Munroe Street and the canal east of Third Street (see Fig. 98). Coal was brought by schooner and barge, and for a time the company operated the *Henry Endicott* in this service (Fig. 410). Coke, tar, and cinders were byproducts and were often shipped via the Broad Canal. At its largest extent, the gasworks had four gasholders, two on each side of Third Street (Fig. 411; see Fig. 420). These and the main plant were demolished in the 1950s after the introduction of natural gas piped from Texas; the only remaining early building is a brick stable from the 1870s that was relocated within the works in 1905 and later stripped of its cupola (Fig. 412).

The gas company's present affiliate, the Cambridge Electric Light Company, was the last industrial user of the Charles River, receiving its fuel oil by barge from Chelsea Creek until 1986. The construction of its power plant on First Street, designed by Gilbert Associates, was completed in 1949. This clean-lined, Art Moderne structure generates approximately 75 percent of the company's present output. The large enclosed coal conveyor that until recently jutted from the building recalled its earlier dependence on coal (Fig. 413).

In 1876, the East Cambridge Land Company petitioned the county commissioners, the City of Cambridge, and the Boston & Albany Railroad for permission to lay a spur along Rogers Street from Sixth Street

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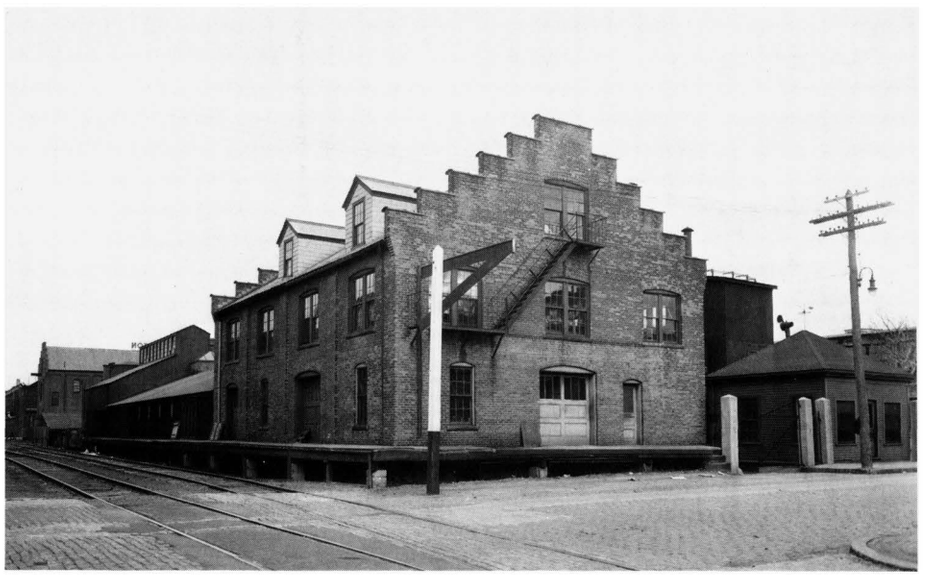
east to Third Street (Fig. 414). The impetus for this was the impending erection of a large new factory, probably the Boston Chemical Works of the Edward Chamberlain Company, which moved from Portland Street to the northwest corner of Rogers and Third streets in 1876–77. The land company hoped that the industrial track would attract other industries and increase the marketability of its property. Because of repercussions from the Panic of 1873, development did not begin until the 1880s, when four major companies built factories there. As these factories expanded in the late 1880s, sidings were built to service them.

The first firm in this area was the Boston Bridge Works, which depended on rail shipments of iron and steel from midwestern mills. The bridge works began on Main Street in 1876 but moved north in 1881 to the block bounded by Rogers, Binney, Sixth, and Ninth streets. Additional property between Ninth Street and the Boston & Albany Railroad tracks was purchased in 1888, and a siding was constructed. The company was a major fabricator of steel and iron bridges and frames for buildings; among its local projects were the Harvard Bridge (1889) and the frames of the Tremont and Worthington buildings in Boston.

In the 1880s, additional sidings were laid from the Rogers Street track directly into several factories. The Alden Speare's Sons Company, in the block between Rogers, Binney, Fifth, and Sixth streets, was typical. Manufacturers and dealers in oils, starches, and mill and laundry supplies, the company maintained offices throughout the United States, but its largest operation was established in East Cambridge in 1886. Tank cars containing several thousand gallons of oil could be emptied by pumps in half an hour. The company also maintained a wharf on the Charles River to receive imported oil, and supplied neighboring factories through connecting pipelines.

Several of the company's later buildings still stand. In 1908, Speare's built a large oil storage building at 219 Fifth Street for the Galena Signal Oil Company of Franklin, Pennsylvania. Designed by Charles & Bailey in 1908, this two-story brick and granite building has an unusual stepped gable roof. A one-and-a-half-story addition to the rear was built in 1913 and continues the style of the original structure. The company built a similar two-and-a-half-story building with a stepped gable at 146 Sixth Street in 1913 (Fig. 415). At 156 Sixth Street, on the corner of Binney, stands the most elaborate of Alden Speare's buildings. Constructed of reinforced concrete with brick spandrels and a rudimentary frieze with inset panels of patterned brick, it was designed by French & Hubbard in 1911 and served as the company's office (Fig. 416).

The Rogers Street track also attracted the National Linseed Oil Company, which purchased a lot at the northwest corner of Rogers and Fifth streets from the East Cambridge Land Company in 1887. By 1909, the plant covered the entire block between Fifth and Sixth streets. The block is now occupied by a New England Telephone Company building of 1975, notable at the time of its construction for the uncompromising treatment of its windowless bulk and the brightly painted ventilators.



415. Alden Speare's Sons Company, 146 Sixth Street, 1913. Photograph 1933

416. Alden Speare's Sons Company, 156 Sixth Street, 1911, French & Hubbard. Photograph 1933

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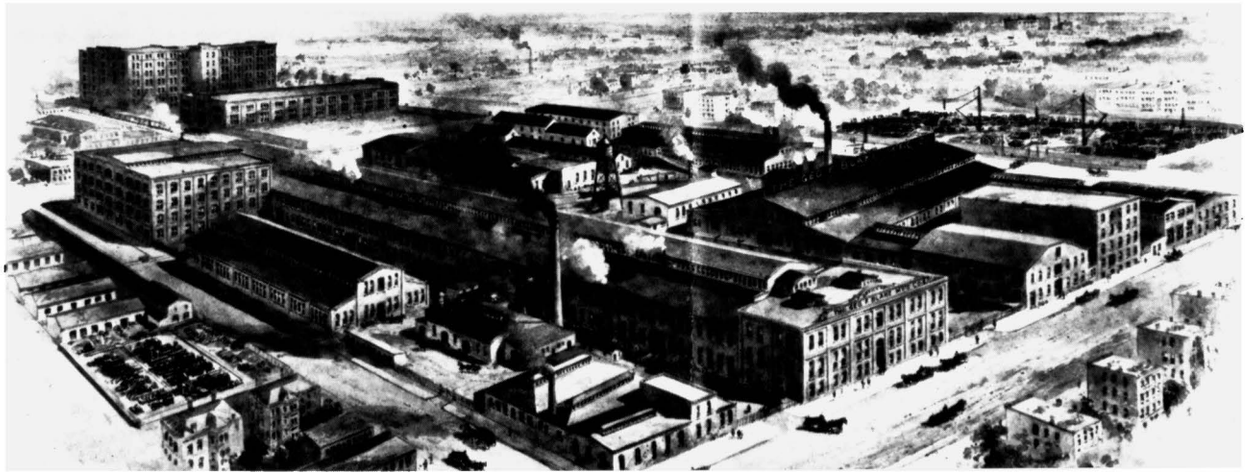

417. Blake & Knowles Steam Pump Works, c. 1900

418. Blake & Knowles Foundry, 180 Bent Street, 1889. Photograph 1970

One of the largest companies served by the Rogers Street track was the George F. Blake Manufacturing Company, which bought several parcels from the East Cambridge Land Company and erected a factory in 1889. In 1862, George Blake, a mechanical engineer at Peter Hubbell's brickyard in Cambridge, patented a steam pump to keep the clay pits free from water. Two years later, Blake, Hubbell, and Job A. Turner began manufacturing the pumps in Boston. A new company was formed in 1874, and in 1879 it purchased the Knowles Steam Pump Works at Warren. By 1881, Blake was using the foundry of D. P. Green at the southwest corner of Bent and Third streets.

The company's first major building was a brick machine shop and office at 265 Third Street, designed by S. M. Gager in 1889. It set a precedent for the firm's later structures, all of which were executed in a paneled brick style more elaborate than the typical mill construction used elsewhere in East Cambridge (Fig. 417).

A foundry at 180 Bent Street, also designed by Gager, contained two electric traveling cranes of 35 tons' capacity, a major innovation at the time. This structure faces both Bent and Rogers streets and is the most impressive of the remaining Blake buildings (Fig. 418). The former brass foundry and smith shop at Binney and Third streets are also of great interest. Because these were small shops that required natural light, both have clerestories and share a common chimney. Other remaining structures include machine shop additions at 218 Fifth Street (1897) and 201 Binney Street (1899) and two concrete structures, 195 and 199 Binney Street (1917).

By 1896, the Blake Company, with its 5½-acre plant and 1,000 employees, occupied a prominent place in industrial East Cambridge. Connections to the Boston & Albany Railroad allowed Blake to ship everything from pumps weighing a few hundred pounds to waterworks pumping engines weighing more than a million pounds. In 1897, the firm merged with the Crompton & Knowles Loom Works of Worcester to form the Blake & Knowles Steam Pump Works. Blake & Knowles and seven affiliated companies were reorganized in 1916 as the Worthington Pump & Machinery Corporation. The Blake & Knowles works operated until 1927, when the factory was subdivided and the buildings sold.

The last industrial area to develop was the former tidal flats on the Charles, on both sides of what is now Commercial Avenue and First Street south of Charles Street to the Broad Canal. The street plan and the layout of the Lechmere Canal were established as early as 1874, when the Cambridge Improvement Company secured the right to extend First Street south to Main Street. First Street was finally completed in 1892, and some filling was done on both sides of it between the Broad Canal and Binney Street that year.

One of the earliest buildings here was the Athenaeum Press (1895), which covers the full block of Athenaeum, First, Second, and Munroe streets (Fig. 419). Designed by Lockwood, Greene & Company, architects and mill engineers, the 200-by-70-foot building combined conventional 19th-century mill construction techniques with a new emphasis on structural and manufacturing efficiency, including innovations in ventilation, plumbing, lighting, and fireproofing. Since the Athenaeum Press occupied a prominent riverfront location, many stylistic features were added to the exterior, including a central pavilion topped by a statue of Athena (which has recently been reinstalled) (see Fig. 78).

Further development of the area came with the construction of the Munroe Street spur in 1909. There had been an attempt in the late 19th century to promote residential development on Munroe Street, but this was not very successful. The 1886 Cambridge atlas

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419. Athenaeum Press from Second Street. Photograph c. 1925

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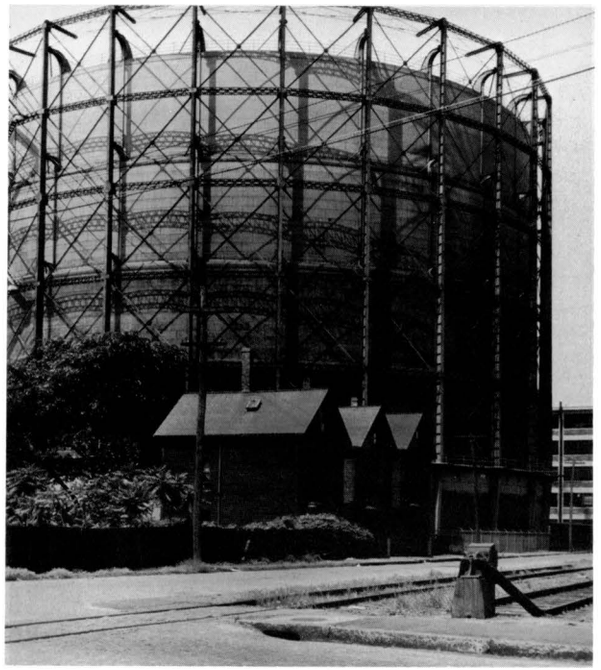

420. Monroe Street looking west from Third Street. Photograph 1940

421. New England Maple Sugar Company, 223 Second Street, 1907, G. H. Taylor. Photograph 1969

shows the south side of the street divided into narrow house lots, but only three wooden houses were built on land owned by the East Cambridge Land Company (Fig. 420).

In April 1909, the land company granted the Carter's Ink Company and the New England Maple Sugar Company the right to build a track along Munroe Street between Ninth and First streets (see Fig. 414). This attracted several major industries, and eventually the Boston & Albany built sidings into the Athenaeum Press (1910), Adolf Somer Viscol Manufacturing Company (1910), Cambridge Gas Light Company (1911), Warren Brothers Company (1912), and E. P. Sanderson Company (1912). By 1914, the area south of Binney along both sides of First Street had become solidly industrial. The filled land along Commercial Avenue was not developed until after World War II, when the spur was extended to serve warehouses there.

The New England Maple Sugar Company, established in Boston in 1901, moved to East Cambridge in 1907 and built a three-story brick plant on the northwest corner of Munroe and Second streets along the industrial track (Fig. 421). When it arrived in East Cambridge, it was already one of the largest packers

422. Carter's Ink Company, 239 First Street, 1909, Densmore & LeClear. Photograph 1911

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423. Carter's Ink Company truck, 1911

424. Ashton Valve Company, 161–179 First Street, 1907, Densmore & LeClear. Photograph 1970

of honey in the United States, shipping its Golden Tree maple sugar and honey products all over the country and into Canada. The building was sold in 1918 to the Crew Levick Company, an oil manufacturer, and was recently remodeled for office use.

The Carter's Ink Company was founded in Boston in 1858. By the time it moved to East Cambridge in 1909, it was a major manufacturer of special inks, typewriter ribbons, and carbon paper (Figs. 422–423). Its building, designed in 1909 by Densmore & LeClear, was built only two years after the Ashton Valve Company building at 175 First Street by the same firm (Fig. 424), and illustrates the transition from conventional brick mill construction to fireproof reinforced concrete. The structural bays are clearly expressed on the exterior, and much larger window openings are possible than on brick bearing-wall buildings. The facade, however, has a rusticated first story and classical pilasters and entablature, all evoking earlier stone construction rather than the new concrete. Carter's Ink owned the building until 1976, when the company moved to Waltham.

The rapid transition away from an industrial economy in East Cambridge has been no less startling than the widespread conversion of factories into offices. The Athenaeum Press, American Net & Twine, Ashton Valve, Carter's Ink, Irving & Casson–A. H. Davenport, and New England Maple Sugar Company buildings represent the new wave of adaptive reuse that characterizes this formerly industrial zone. The preservation of these buildings would have been unthinkable not long ago, and contrasts sharply with the clearance of the Kendall Square urban renewal area.

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425. Unidentified children in East Cambridge, c. 1910

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V

Life and Work in the 19th Century

East Cambridge is much more than a collection of buildings. The generations of families and workers who lived here established a vital neighborhood. Information on the earliest residents is sparse, but it is known that many were glassworkers or other craftsmen. By 1850, a number of industries were flourishing, and immigration was bringing many new settlers; socially the community remained mixed, with a variety of ethnic groups and occupations living on most streets. As the area became increasingly industrial toward the end of the century, residential patterns changed, and streets became known for particular nationalities or occupations. This chapter focuses on how industrialization and immigration influenced the social and physical development of the neighborhood.

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Community Life on Lechmere's Point

Little is known about life in East Cambridge before the middle of the 19th century. City directories were not published until 1849, and census records before 1850 contain no addresses or occupations. Clues about the first residents must be gleaned from petitions, membership lists, probate records, deeds, and the accounts of the Lechmere Point Corporation.

The earliest record of East Cambridge residents acting as a group is a December 1811 petition asking the town to establish a school so that their children would not have to travel to Cambridgeport (Fig. 426). Nineteen male "freeholders and other inhabitants" of Lechmere's Point signed the petition, which gave the area's population as 82, half of whom were under the age of 14. Thus, about forty people of working age had settled in East Cambridge by this time. The nineteen petitioners included two housewrights, three tavern- or innkeepers, a trader, and a chaisemaker; the occupations of the others are unknown.

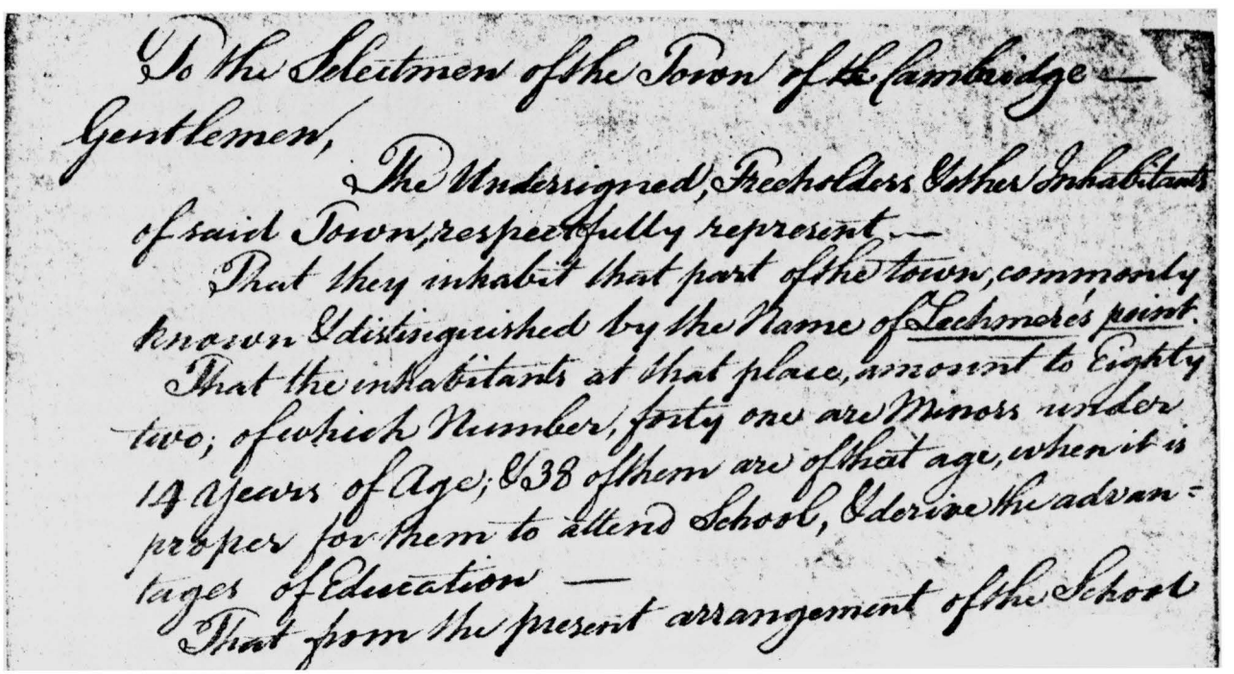
Eight of the adults are known to have purchased lots from the Lechmere Point Corporation; others, such as hotelkeeper Marvin Marcy, leased buildings that the corporation had erected near the junction of Cambridge and Bridge streets. Lots on Bridge Street were the most desirable at this period, and most people lived on the north side of Cambridge Street and on Bridge and Gore streets east of Second Street.

Many of the household heads were in their thirties and forties and had children, indicating that established families were moving into this area, in contrast to the many single laborers who later came to live in boardinghouses. There was no industry in East Cambridge in 1811, so residents worked in the more settled parts of Cambridge, crossed the bridge to Boston, or ran their own businesses or workshops nearby.

Probate inventories give some information on living conditions in this period. When housewright Josiah Childs died in 1814, he was the chief contractor for the new courthouse at Lechmere's Point and lived in a substantial three-story brick house (long since demolished) on the north side of Bridge Street near the intersection with Gore Street. According to his inventory, he owned an extensive collection of carpentry tools and pieces of moulding but surprisingly few furnishings. His house did contain seven bedsteads, and tax records suggest that he took in boarders, probably carpenters working on the courthouse. Childs rented a pew in a Boston church, for there were no churches in East Cambridge until the 1820s.

By 1814, employment was available building the new county buildings on Third Street and at the Boston Porcelain & Glass Company on Water Street. County records indicate that during the two years of courthouse construction, an average of twenty-five carpenters were employed each day, as well as numerous masons, teamsters, ironworkers, and other craftsmen. Carpenters were paid good wages, up to $1.84 per day, and the quantity of rum and sugar and mugs of flip (a beer-based drink) delivered to the site to mark each stage of construction indicates that the work had other rewards as well. Some of the workers are known to have lived at Lechmere's Point, but the homes of most are unknown.

Between 1814 and 1816, the Lechmere Point Corporation recorded only four lot sales, but the two boardinghouses, the tavern, and the hotel owned by the company provided lodging for workers, and many residents, like Josiah Childs, took in boarders. When innholder Calvin Brooks died in 1818, he had been running a tavern near the Craigie Bridge since 1809. The eleven bedsteads listed in his inventory give some indication of the size of his tavern (lodgers generally


To the Selectmen of the Town of Cambridge —
Gentlemen,
The Undersigned, Freeholders & other Inhabitants
of said Town, respectfully represent —
That they inhabit that part of the town, commonly
known & distinguished by the Name of Lechmeres point.
That the inhabitants at that place, amount to Eighty
two; of which Number, forty one are Minors under
14 years of age; & 38 of them are of that age, when it is
proper for them to attend School, & derive the advan-
tages of Education —
That from the present arrangement of the School

426. Petition to establish a school at Lechmere's Point, 1811

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slept more than one to a bed), while his tea set, silver spoons, and plated candlesticks suggest that a certain prosperity and elegance were possible even in this new area.

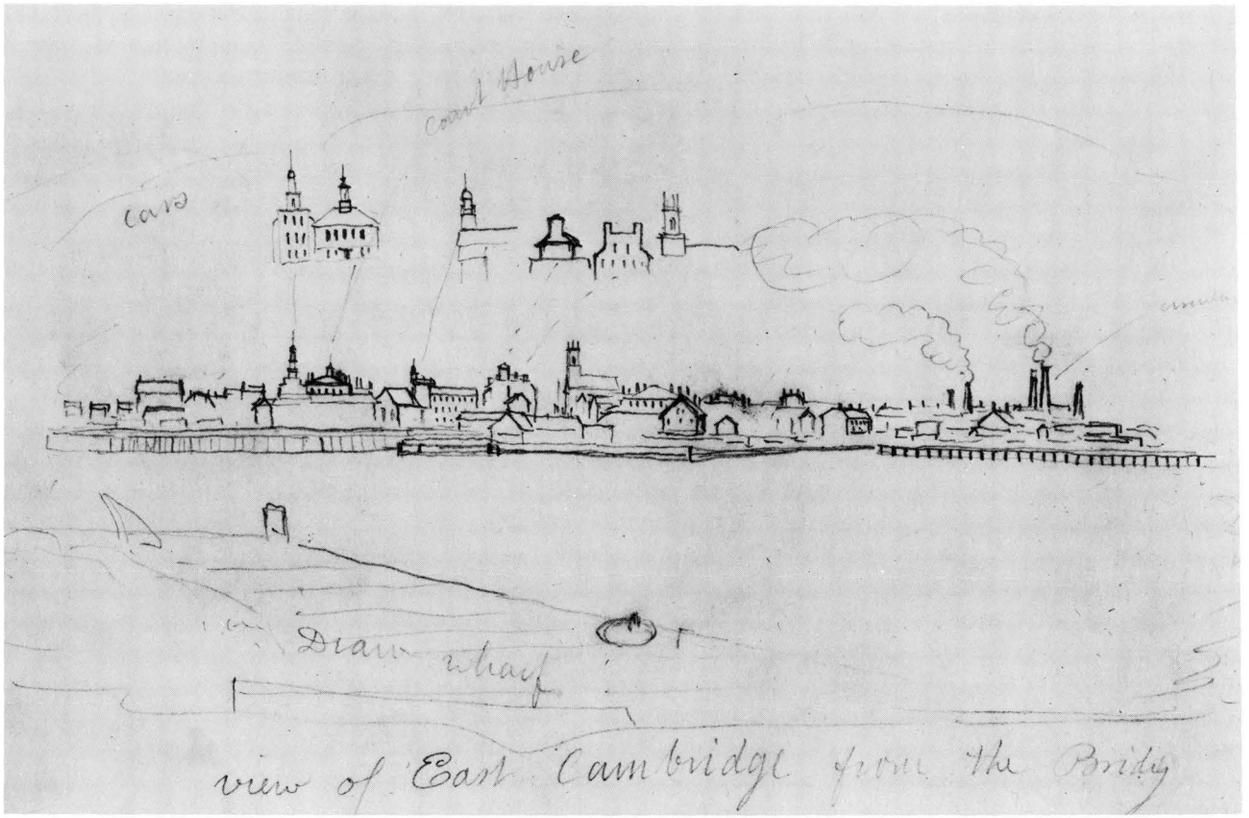
East Cambridge continued to support some farming, as it had since the 17th century. When Isaac Russell died at Lechmere's Point in 1819, inventory and tax records show that he and his brother Walter ran a farm containing 30 acres of mowing and tillage, 30 acres of marsh, and 15 acres of pasture, with six cows, two oxen, and $200 worth of crops in the ground (see Fig. 16a). With their father, the Russells had lived in East Cambridge since the 18th century, leasing their land from Andrew Cabot, then from Craigie, and finally from the Lechmere Point Corporation. A 19th-century account states that the elder Mr. Russell "was lost in the ice, when carrying milk to Boston in 1784" (Simpson, p. 73).

Only two other residents were taxed for farmland at this period, one for 4 acres of mowing and tillage and one for 30 acres of pasture, so that the Russell farm was by far the largest. Isaac Russell's death most likely marked the end of agriculture in East Cambridge; Walter moved away and the farmhouse, Thomas Graves' old house, was torn down in about 1820 to evict squatters.

Between 1810 and 1820, the population of Cambridge increased by 1,000, from 2,323 to 3,295. The population of East Cambridge is unknown, but it cannot have been more than a few hundred. Despite the petition of 1811, it was not until 1818 that a one-room school was built on Third Street between Winter and Gore, reflecting the early concentration of houses north of Cambridge Street.

The 1820s saw substantial growth in East Cambridge. The population of Cambridge doubled, to over 6,000 in 1830, and in 1823 a writer estimated East Cambridge's population to be about 1,000. In 1820, only 106 adult males at Lechmere's Point had paid the poll tax to be eligible to vote; by 1822, this number had risen to 223 and by 1829, to 284.

Glassworkers were a major element of East Cambridge's population almost from the beginning, and the glass companies were the first to attract immigrants. Many were skilled workers from England and Scotland



427. Sketch of East Cambridge from the Warren Bridge, Boston, 1838. Buildings detailed at the top are, from left, the Second Unitarian Church, the Middlesex County Courthouse, an unidentified building (possibly the Wesleyan Academy), Ebenezer Chapel, the houses at 204–210 Cambridge Street, and the Second Baptist Church

with an average age of 25 in the 1810s and 1820s. Some landed in New York or Boston and later moved to East Cambridge, while others contracted directly with a company for their passage and a job; less than half stayed in East Cambridge more than a few years. This selective hiring of skilled workers from abroad contrasted sharply with the unsolicited immigration of unskilled laborers in the following decades. The contract that the New England Glass Company offered two English glassworkers in 1829 was a typical arrangement:

he [our agent] *has kindly agreed to pay your passages from England on the following conditions, viz — that you arrive here at the regular wages that is given here which is very good — providing you are steady men. If you are not steady you had better remain where you are for a drunkard is despised in this country. (Leighton letter, Corning archives)*

As the population grew, East Cambridge began to acquire urban amenities and social organizations. In 1820, a group of seventeen residents organized the volunteer Lechmere Point Fire Society. At least three of the organizers had lived there since 1811, and two thirds were homeowners. Their occupations ranged from sheriff and innkeeper to potter and mason; at least five worked at the glass factory. The Lechmere

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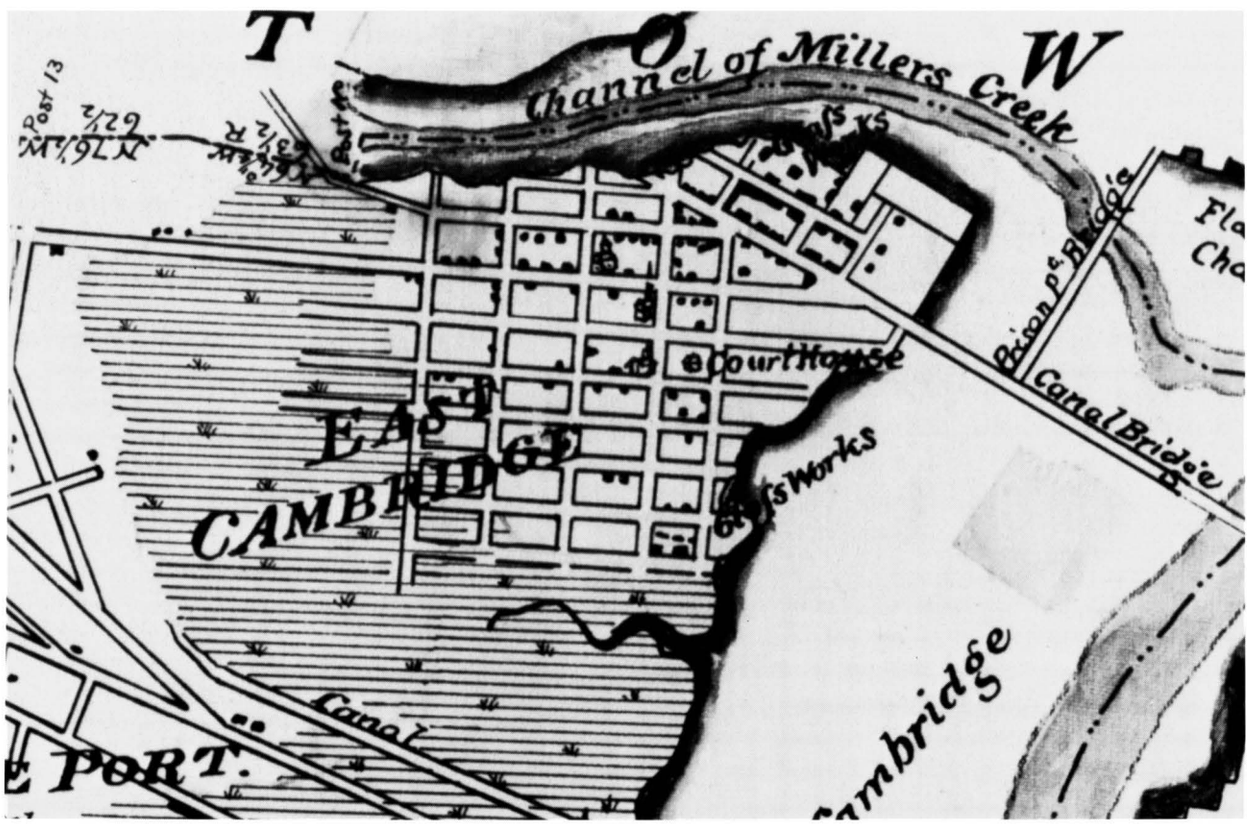
Point Social Library was organized in 1822. Members held shares in the library valued at $5 each, and paid $1 annually for the privilege of checking out one or two books at a time. The Niagara Engine Company had an interest in the library, and the two may have shared space as the library, police station, and firehouse did later in the century. Another early organization was the East Cambridge Lyceum, formed, according to its constitution, for the "mutual improvement of its members, and the acquisition and diffusion of useful knowledge" through monthly debates.

Glass company employees were a major force in organizing East Cambridge's first church. In 1817, a group of Methodists began meeting in private homes and by 1823 was incorporated as the Methodist Religious Society in Cambridge. Two thirds of the men worked in the glass industry, and others whose occupations are known were primarily skilled craftsmen from England; English Methodist congregations at this period were also largely made up of artisans. As the community grew, other churches were organized, and by 1842, all five churches in East Cambridge were located along Cambridge Street or in the two blocks between Cambridge, Thorndike, Third, and Fourth streets, making this the center of neighborhood life (Fig. 427).

By 1825, a second public school was erected south of Cambridge Street, reflecting the construction of new houses away from the early factory area to the north. In 1829, East Cambridge reported 557 children between the ages of 3 and 17 years, more than any other of the five school districts in the city.



428. East Cambridge in 1830

John Hales' 1830 map shows about 100 buildings in East Cambridge (Fig. 428). The heaviest concentrations were on Cambridge, Bridge, North, and Gore streets, including some crowded row houses opposite the New England Glass Company (Fig. 429). The thoroughfares to the bridge and the industries north of Bridge Street remained the primary focus for residential construction, in spite of the proliferation of public buildings south of Cambridge Street.

Tax records indicate that much of the population rented houses if married or boarded if single. Taking in boarders was a common way of maintaining a household when propriety favored the single-family house. Only twenty-six homeowners were listed in the 1829 tax records. Almost half of the buildings on the 1830 map were owned by Edmund Munroe and Amos Binney, absentee landowners who were founders of the New England Glass Company and early investors in the Lechmere Point Corporation. The tax records for 1827 show that Munroe owned eight rental houses, a blacksmith shop, a barber shop, a carpenter shop, and four other shops, as well as 115 undeveloped lots; Binney owned thirty-four houses, a brewery, a store, two buildings in "mechanics row," and twenty-four lots.

A survey of manufacturers conducted by the U.S. government in 1832 showed that East Cambridge supported a large work force, with 351 men, 60 boys under the age of 16, and 32 women employed in the area's industries. The highest paid were the organ makers, who earned $1.50 a day, and the glassworkers at New England Glass Company, who earned up to $1.33. (These figures refer to industrial workers; master craftsmen, such as the carpenters who built the courthouse, earned more.) Average wages at the other two glass companies were slightly less. In 1832, the glass industry employed almost 70 percent of the known work force in East Cambridge. Brushmaking, candlemaking, and boot- and shoemaking paid less, and all the industries had some very low-paying jobs for unskilled laborers.

Boys under the age of 16 generally earned 50 cents a day, and the few industries that employed women paid them the same or less. Women ran many of the

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boardinghouses, and, judging from later 19th-century statistics, a number were probably also working as dressmakers in their own homes or held service jobs in the neighborhood.

As new groups moved in, more churches and social organizations were established to accommodate them. By the late 1830s, there were enough Catholics to establish the city's first Catholic Sunday school, although there was no Catholic church; residents attended mass in Boston or Charlestown, sometimes crossing by rowboat to avoid paying tolls. The first Catholic organizers in East Cambridge were converted Protestants, but in the 1840s their ranks were swelled considerably by Irish immigrants. When the first meeting was held in 1842 to raise subscriptions for building a church, the Irish were instrumental in seeing the new St. John's Church quickly completed.

The 1830s and 1840s brought other social and physical changes. As the population increased and the area became more industrial, liquor became a problem, and the first temperance societies were organized. In 1830, a group of citizens met in the Methodist church to found the East Cambridge Temperance Society. In its first year, it boasted almost 350 members, both male and female, who pledged to combat "in all suitable ways . . . intemperate appetites and habits" in the community. The officers were long-time residents who included physicians and glassworkers as well as seven ministers. Most of the members were native rather than foreign-born.

Similarly, the East Cambridge Union Temperance Society grew from only a handful of members at its founding in 1839 to 76 in 1841 and to 963 in 1847. It also had an affiliated "Cold Water Army" of more than 300 children. While earlier temperance groups tolerated wine and milder drinks, the society advocated total abstinence and actively worked to change drinking habits. It reported in 1843 that it had reformed 43 drunkards, but estimated that another 100 drunkards as well as 300 to 400 occasional drinkers remained to be brought under its influence.

The Sons of Temperance, active in Cambridgeport and Old Cambridge, expanded into East Cambridge in the 1840s. East Cambridge residents joining this organization were primarily craftsmen — carpenters, organ builders, glasscutters, glassblowers, blacksmiths, and boot- and shoemakers — as well as a few businessmen. Almost all were in their twenties and thirties.

429. Lechmere Place, off North Street. Houses c. 1825. Photograph c. 1900

There had always been taverns and saloons in East Cambridge; they were the first buildings constructed by the Lechmere Point Corporation. But as immigration grew, the saloons proliferated, and residents grew less tolerant. The Union Temperance Society reported in 1843 that there were two taverns, four stores where drinks were sold, and "at least 17 or 18 places, the most of which are the very sinks of pollution and vice, and all of which are low and miserable plague-spots among us." The society also condemned "the erection of a large and commodious building near the entrance of our village, where . . . all the requisite helps to intemperance may be found" (Report, pp. 3–6). Perhaps coincidentally, the Lechmere House, which may have been the source of complaint, burned a few months later but was soon rebuilt.

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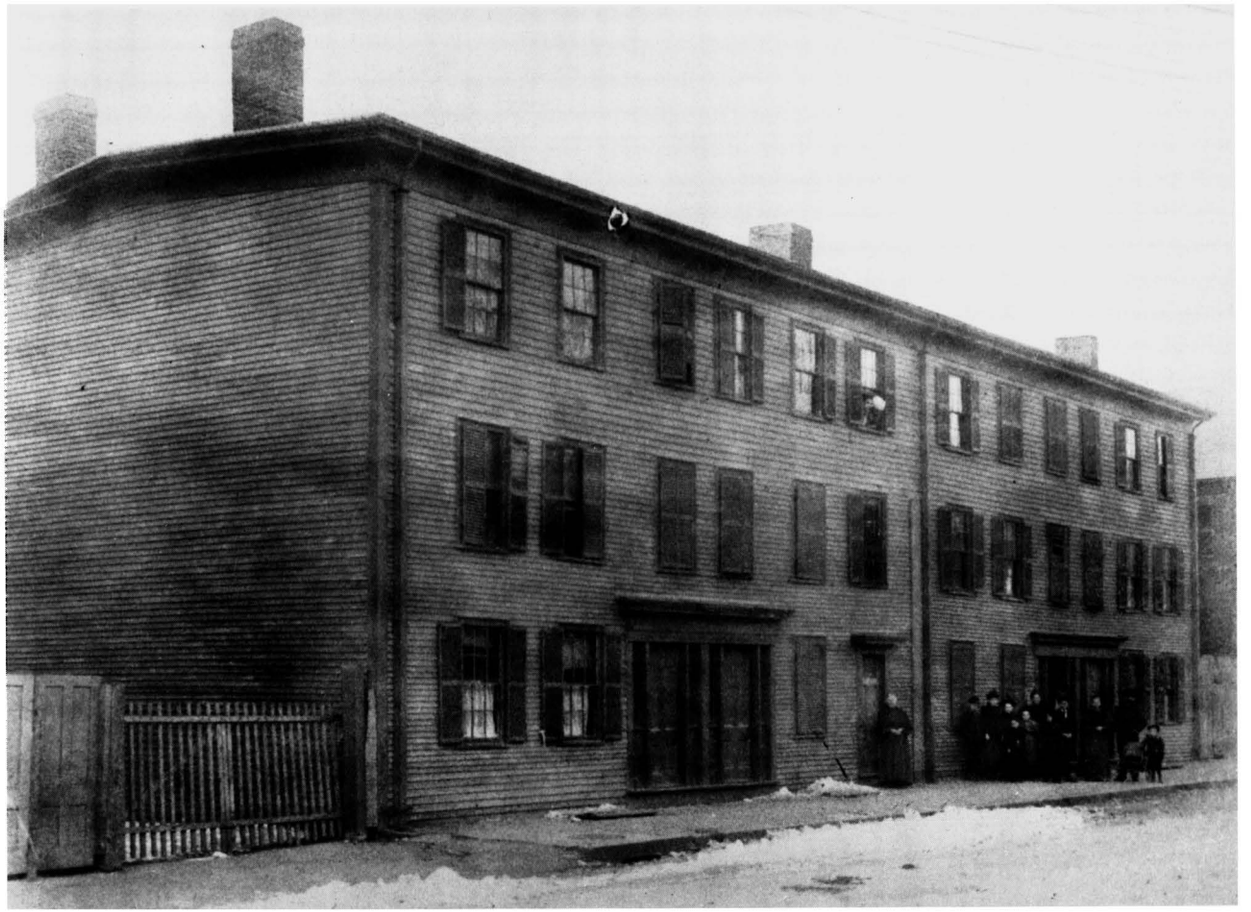
Irish Immigration



430. Coffin's Block, 52–58 North Street, c. 1850. Photograph c. 1900

From the beginning, immigration was a significant factor in the development of East Cambridge, and it remains so today, although the size and character of the immigrant population has changed completely. In the early 19th century, the newcomers were primarily skilled craftsmen from England, Scotland, and Germany, who were pressed by industrial changes at home and chose to move to industrial cities in New England. Many of the glassworkers found work as engravers, cutters, and blowers, and the New England Glass Company advertised the use of "experienced European Glass Cutters" as early as 1818.

There was some early immigration from Ireland as well, but naturalization records indicate that before the 1830s, many came from the northern, predominantly Protestant, part of Ireland and worked in a variety of skilled and unskilled trades. By the 1840s, the pace and character of Irish immigration changed dramatically with the great influx from southern Ireland. Overwhelmingly Catholic and largely unskilled agricultural workers, many arrived destitute and without the resources to make a new life. Later in the century, other groups, such as the Portuguese and the Poles, began to arrive, but none had such a dramatic effect as the Irish on the development of East Cambridge.

Between 1840 and 1845, the city's population grew 49 percent, from 8,409 to 12,490. The population of East Cambridge also rose significantly, to more than 4,500 in 1846. Much of the increase was due to the devastating potato blight that struck Ireland in 1845 and soon caused much of the country's rural population to flee. Many landed in Boston, where, according to Oscar Handlin, they were crowded into the worst houses in the city, found few jobs, and remained the least assimilated in society. No doubt attracted by its burgeoning industries, many moved to East Cambridge. This influx is reflected in census and school statistics. In 1833, 392 children were enrolled in East Cambridge schools. By 1841, this number had increased only to 410, but by 1844 it had reached 670.

According to the 1844 city school report, the number of school-age children in East Cambridge was actually much higher, but only one seventh of the eligible students attended the upper grades; by contrast, one third of the eligible students attended in the city's other two wards. A history of St. John's Literary Institute, written in 1904, said that boys often left school at ten or twelve to join their fathers in the glass factories, as one income per family was far from adequate.

So great was the tide of immigration that by 1848, 97 percent of the students at the Third Street School, in the heart of what was becoming a working-class neighborhood, were foreign-born. Many were the chil-

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dren of Irish laborers in the glassworks. In the 1850 U.S. Census, 22 percent of East Cambridge adults claimed Ireland as their place of birth, more than in any other part of Cambridge.

A study of this Irish population suggests that only about half belonged to the urban underclass described by Handlin and that many may have fared considerably better than their countrymen in Boston. By correlating names in the 1850 census with those in city directories, it is possible to explore the experiences of 210 Irish males in East Cambridge at midcentury.

Compared to the overall working population in 1850, many of the Irish listed indeed worked at low-paying, menial tasks, similar to Handlin's description of the Boston Irish. Some 78 percent of all day laborers in East Cambridge were born in Ireland; only 6 percent were born in the United States. Laborers were at the bottom of the occupational ladder and had no job security. They did the heavy work in construction and industry, such as moving sand and coal at the glassworks and meat and refuse at the slaughterhouses and soap factories.

What distinguished day laboring from factory work and the trades were chiefly wage levels and stability of employment. Even unskilled factory workers earned about half again as much as day laborers, and skilled workers' wages were generally at least twice those of laborers. No industry offered complete security, but men hired as laborers one day had no guarantee of work the next. Factory hands and skilled men could count on much more stability in their jobs than laborers, and their lives were considerably more comfortable.

Although most laborers were Irish, not all the Irish were laborers. One third of the Irish studied found steady jobs in factories or skilled trades. Others were proprietors of small grocery and dry goods stores or were sales clerks. The glass industry had the largest concentration of Irish workers (10 percent of the known Irish work force); more than half of them were skilled glassblowers, the highest-paid workers in the factory.

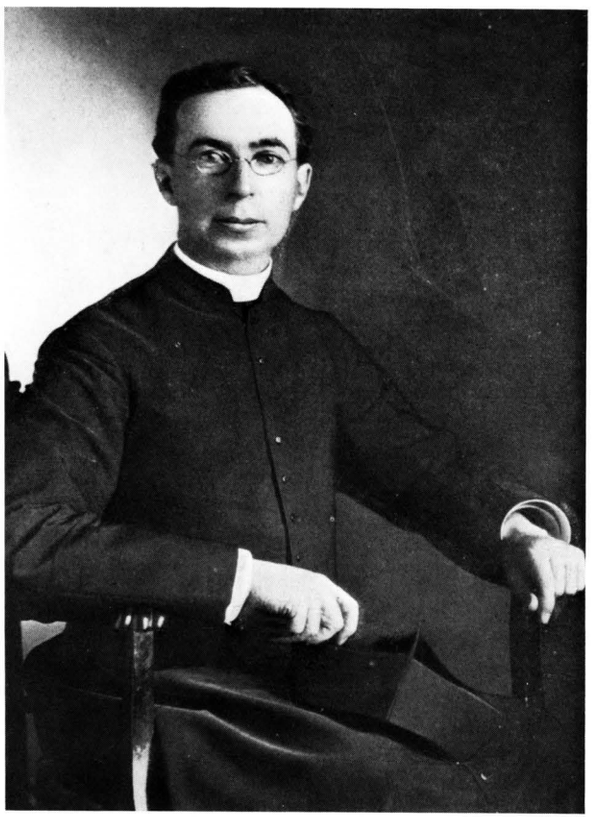
At the other end of the occupational scale, less than 1 percent of the manufacturers, larger merchants, and professional men were Irish, while native-born men accounted for 90 percent of this group. The only Irish manufacturer in the sample was a 30-year-old pickle maker, who worked in Charlestown, and the only Irish professional was a clergyman at St. John's Church.

Thus, a complex picture of the Irish emerges: many held unstable, unskilled, and poorly paying jobs, but a substantial number held steady jobs with good incomes similar to their counterparts of native and West European descent. No other group in East Cambridge was so divided; the English, Scots, and Germans were concentrated in skilled manual occupations, and Massachusetts natives were evenly distributed across the occupational spectrum, although few were day laborers.

The center of the Irish community was in the tenements and row houses north of Bridge Street, in a dense neighborhood surrounded by factories, glassworks, and wharves (Fig. 430), and divided by the Boston & Lowell Railroad, which ran through the back yards of the houses along North and Bridge streets. Nearly 55 percent of the residents here in 1850 were Irish, representing almost half of all the Irish in East Cambridge. Seventy percent of the Irish males in this area were laborers and many of the women were domestics, but six out of the ten Irish grocery store and shop proprietors also lived there.

There were also many Irish on Spring, Charles, and Vine streets, a sparsely settled, poorly drained area between the upland and the Great Marsh. Here, 30

431. John and Francis J. Butler, c. 1862



432. Reverend Francis J. Butler, c. 1900

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percent of the adults were Irish, and 77 percent of the men were laborers. Smaller concentrations of skilled Irish workers lived along Gore and Winter streets (13%) and Cambridge Street (15%), while on Otis and Thorndike streets, where the middle and upper middle class was beginning to cluster, only 2 percent of the adults were Irish.

Overall, the Irish population owned less property than any other native or foreign-born group. Among the 22 percent of Irish males who held property in 1850, the average value was $1,750, compared to $4,880 for natives and nearly $4,000 for Scottish immigrants. However, for every occupation (even laboring) with substantial numbers of Irish, the Irish were more likely to own some property than other foreign groups, implying a high degree of motivation in spite of low wages.

The experience of one Irish family in East Cambridge is illuminated by a daguerreotype of John Butler and his son Francis (Fig. 431). John was born in Ireland in 1824 and came to America between 1853 and 1855. He worked as a laborer and moved frequently between lodgings on Gore, East, Bridge, and Winter streets. At the time of the portrait, he and his wife, Catherine, had a daughter and three sons. Francis was born in 1859 and took a classic path out of the neighborhood. He attended the Thorndike Grammar School and Boston College High School and graduated from Boston College in 1880. He was ordained in 1883, after attending the Sulpician Seminary in Montreal, and returned to East Cambridge to become assistant pastor of Sacred Heart Church from 1884 to 1889. He served parishes in Dorchester and Somerville until his death in 1927 (Fig. 432).

The tendency of the Irish to form strong social and political organizations in the face of deprivation and hostility in their new country has often been noted by historians. In East Cambridge, these groups were often church-related. In 1849, after the Irish Capuchin priest Reverend Theobald Mathew visited the United States, young Irishmen in St. John's Church organized a Father Mathew Total Abstinence Society. When the Reverend Lawrence Carroll took over St. John's in 1851, he was concerned about the increasing number of young immigrants whose limited education set them apart from their native contemporaries. In 1853, he formed the Guild of St. John, which held weekly lectures and debates for boys. It was an immediate success, though mostly in the winter months, when there was little else to do.

433. Fitzgerald's store, 2 Gore Street. Demolished c. 1910 for Lechmere station. Photograph 1907

In 1854, the Guild's popularity led Father Carroll and a parishioner, Edward Skelly, to form the St. John's Literary Institute, which played an important role in neighborhood life for more than fifty years. The *Cambridge Tribune*, on July 7, 1888, described the early years:

The Society was organized . . . in the glass house district, for the purpose of affording those who could not procure an education elsewhere the means of acquiring common school teaching. . . . For a long time after the society was formed Father Carroll was in the habit of

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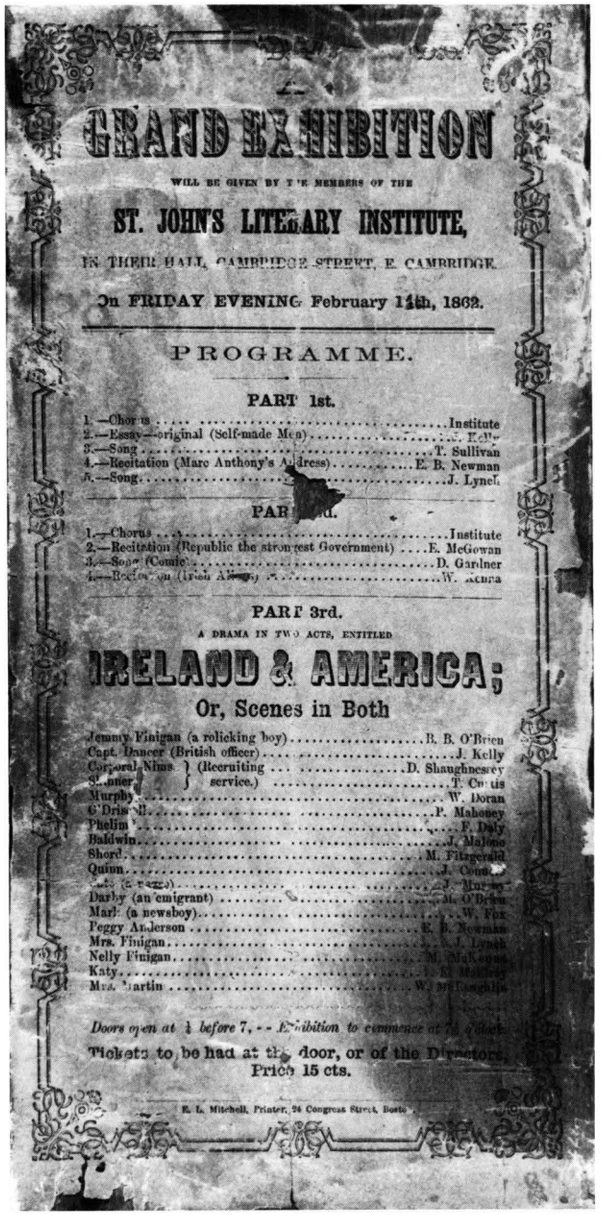


GRAND EXHIBITION

WILL BE GIVEN BY THE MEMBERS OF THE

ST. JOHN'S LITERARY INSTITUTE,

IN THEIR HALL, CAMBRIDGE STREET, E. CAMBRIDGE.

On FRIDAY EVENING, February 14th, 1862.

PROGRAMME.

PART 1st.

1.—Chorus ..... Institute
2.—Essay—original (Self-made Men) ..... J. Kelly
3.—Song ..... T. Sullivan
4.—Recitation (Marc Anthony's Address) ..... E. B. Newman
5.—Song ..... J. Lynch

PART 2nd.

1.—Chorus ..... Institute
2.—Recitation (Republic the strongest Government) ..... E. McGowan
3.—Song (Comic) ..... D. Gardner
4.—Recitation (Irish Abroad) ..... W. Acura

PART 3rd.

A DRAMA IN TWO ACTS, ENTITLED

IRELAND & AMERICA;

Or, Scenes in Both

Jemmy Finigan (a rollicking boy) ..... B. B. O'Brien
Capt. Dancer (British officer) ..... J. Kelly
Corporal Nims } (Recruiting ..... D. Shaughnessey
Skinner } service.) ..... T. Curtis
Murphy ..... W. Doran
O'Driscoll ..... P. Mahoney
Phelim ..... F. Daly
Baldwin ..... J. Malone
Shord ..... M. Fitzgerald
Quinn ..... J. Conn
[illegible] ..... J. Murray
Darby (an emigrant) ..... M. O'Brien
Mark (a newsboy) ..... W. Fox
Peggy Anderson ..... E. B. Newman
Mrs. Finigan ..... J. Lynch
Nelly Finigan ..... M. McKeown
Katy ..... E. Mackey
Mrs. Martin ..... W. McLaughlin

Doors open at 1 before 7, -- Exhibition to commence at 7½ o'clock.

Tickets to be had at the door, or of the Directors.

Price 15 cts.

E. L. Mitchell, Printer, 24 Congress Street, Boston.

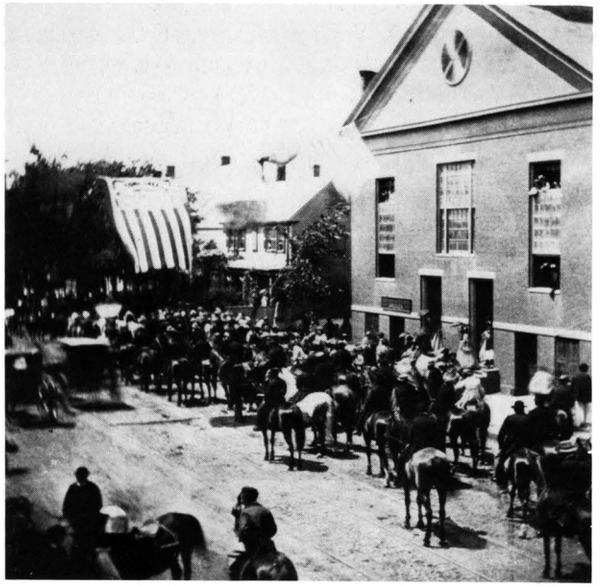
434. Program, St. John's Literary Institute, February 14, 1862

spending his nights at the hall, and giving instructions to such of the glass house boys and old men as desired to avail themselves of the advantages offered. The effect was felt almost instantaneously, for the district, from possessing one of the hardest names of the hard localities of Cambridge, that known as the glass house, became more peaceful.

The members held their first meetings in the loft over Fitzpatrick's butcher store, at the corner of Gore and Bridge streets, the present site of the Lechmere MBTA station (Fig. 433). Christopher Callahan, the first president, and almost all the original members were Irish immigrants. Callahan was a laborer in the glassworks, and six out of the next nine presidents were glassworkers who lived on Bridge, Gore, or Winter street. After 1868, only one glassworker served as president, and after 1870, several of the presidents lived outside East Cambridge, indicating the diffusion of Irish society in the later part of the century.

In the first year, members formed a library that was open to the public and consisted of newspapers, magazines, and the "best and most popular novels and historical works of the day," as well as a school where men could continue their education under the guidance of more knowledgeable members (McMenimen, pp. 10–11). The institute also held fairs, plays, debates, and concerts that became regular community functions. Lectures brought important writers, lecturers, and statesmen to East Cambridge, while the plays were for many years the only dramatic entertainment in the neighborhood (Fig. 434).

As the membership expanded, the institute sought larger quarters. In 1855, it moved to Reed's Hall, a three-story brick building on Bridge Street between Water and Short streets (see Fig. 328). Soon even larger facilities were required, and the institute moved to Buck's Hall on Cambridge Street (see Fig. 330) just before the financial crisis of 1857. Money and jobs were scarce during this period, and many members were obliged to resign. Dissolution was considered, but some of the older members met the institute's obligations from their own pockets. This personal commitment indicates the importance of the institute and the



435. Return of the Sixteenth Massachusetts Infantry at Cambridge and Fourth streets, July 27, 1864

church in the close-knit Irish community, and explains how it was possible to collect vast sums for building a new Catholic church a few years later.

During the Civil War, members were very active in the war effort. Their headquarters at Union Hall (to which they had moved in 1858) became a recruiting station. In 1862, members formed the Institute Guards and offered themselves as a body to the Union forces. They were turned back, as the quota for Cambridge was already filled, but forty-four members enlisted individually, and the Irish gained respect through this demonstration of loyalty to their adopted country (Fig. 435).

After the war, the institute bought its first building, the former Second Universalist Church at 271 Cambridge Street (see Fig. 318), and in 1869 it obtained the first charter the legislature had ever granted to a Catholic organization. The charter defined the institute's aims as "promoting moral and intellectual improvement by lectures, debate, a library, reading room,

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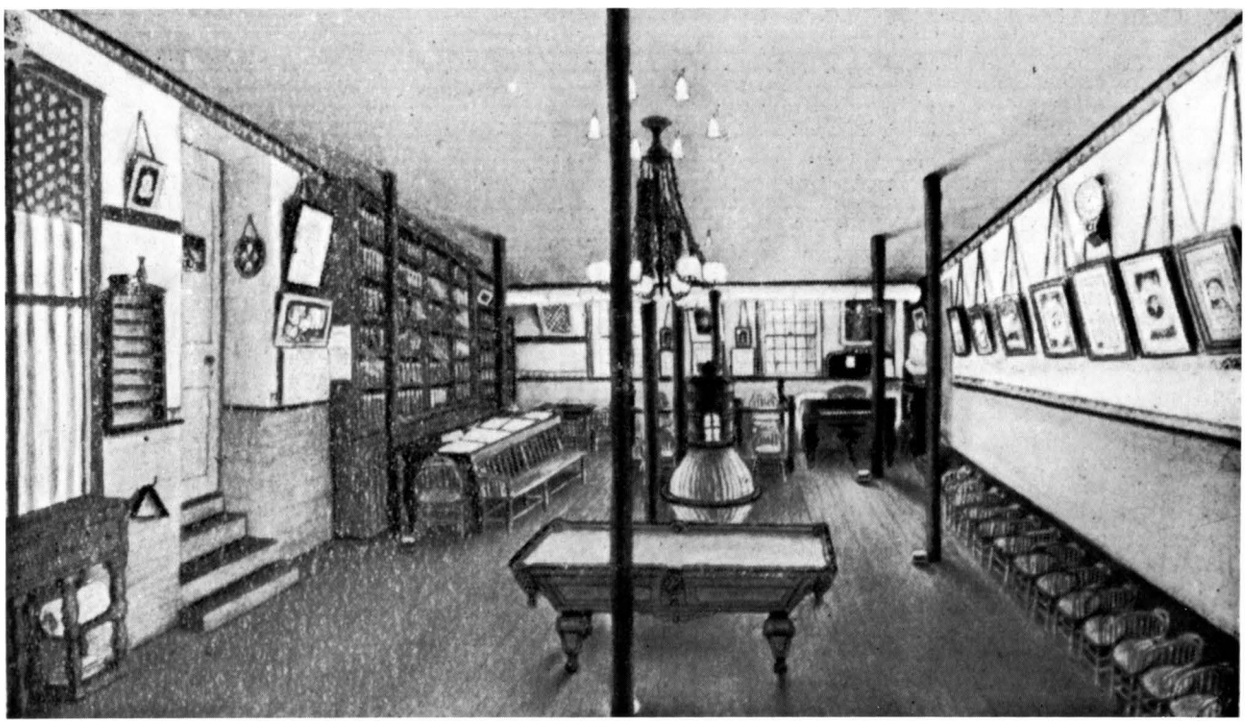
and otherwise" (Fig. 436). Applicants had to be male, at least 16 years old, "Roman Catholic of good moral character," and acceptable to two thirds of the members. Non-Catholics could become honorary members, but it is not known how many achieved this status. By this time, the early predominance of glassworkers in the membership had ended. The range of charitable activities also broadened, and money began to be raised for causes and institutions outside East Cambridge.

By 1887, the character of East Cambridge had changed, and when the institute purchased land behind its building for a major expansion, its older members objected strongly. While they had been willing to settle and invest in East Cambridge themselves, the younger members showed "a decided tendency to settle in other parts of the city or adjoining cities." This meant that their terms as active members were much shorter than those of the older generation, whose institute commitments were considered "as much a part of their lives as their daily labor" (McMenimen, p. 59). The older members feared that the financial responsibility for a new building would fall primarily on them, as the younger men could no longer be counted on to become lifelong members.

Nevertheless, the old building was demolished, and a new one on the same site was completed in 1889 (see Fig. 319). For the next fifteen years, the institute functioned successfully, with a strong membership and a variety of activities that allowed it to support both the construction debt and the new building itself. As the institute approached its fiftieth anniversary in 1904, membership continued to be about 200, but the character of the area and the functions of the institute were changing significantly. The last glass factory had closed in 1888, and many new immigrant groups — Portuguese, Polish, and Italian — were forming their own societies and churches rather than joining St. John's and Sacred Heart.

On September 5, 1918, Father Blunt of the Sacred Heart Church wrote that it was "almost impossible to get a meeting of the members. . . . The institute is now practically a dead thing. The members are few and are unable to meet their liabilities" (Blunt to O'Connell). The remaining members petitioned the parish to take over the property so that it would not go to another denomination. The building was used for parish functions until 1927, when it was taken over by the East Cambridge Catholic Club.



436. Reading room, St. John's Literary Institute, 271 Cambridge Street. Photograph before 1887

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East Cambridge in 1850

East Cambridge was thriving as the middle of the century approached. However, its geographic isolation, explosive growth, industrial strength, and ethnic character made it so different from the quiet Yankee village around the Common that in 1842, Old Cambridge asked the General Court to be incorporated separately from East Cambridge and Cambridgeport. Similar petitions were filed by Old Cambridge residents in 1844 and 1846, and in 1855, a petition asked that East Cambridge be set off as a separate town. All were voted down, but the differences among East Cambridge, Cambridgeport, and Old Cambridge were keenly felt for many years.

Information available at midcentury provides a more complete picture of East Cambridge. The first citywide directory, listing the occupations and home addresses of most male and some female residents, was published in 1849, and in 1850 the U.S. Census first recorded occupations of heads of household and the ages and ethnic backgrounds of all family members.

While the exact population in 1850 is unknown, the 1849 city directory lists a total of 1,050 adults living in East Cambridge. Comparing listings in the 1849 and 1851 directories with the 1850 census manuscript schedules produced a population of 2,038 adults in about 750 families that could be studied in detail. Persons as young as 15 were considered adults because many held the same kinds of jobs as older workers.

The 1850 census recorded only men's occupations. City directories recorded the occupations of some women — teachers, nurses, dressmakers, and boardinghouse keepers — but not manual or domestic service workers. Of the women in the 1849 and 1851 directories, 43 percent were identified as widows, but it is known that many took in boarders to support themselves. Given the lack of complete information, the role of women in the work force cannot be adequately determined, so the following table presents statistics for men only (Table 1).

The 400 occupations listed for East Cambridge men in the 1850 census reflect the apparent self-sufficiency of the community at this time. Grouping these occupations into skill levels and classes gives an idea of the kinds of workers in the community.

About 14 percent of the employed men were involved in business, legal, medical, and religious pursuits. Only six lawyers lived in East Cambridge; perhaps members of the bar found Boston more congenial. Manufacturers operated soapworks, glassworks, brushmaking shops, and various metalware factories, as well as such diverse firms as a feather duster factory. The manufacturers were generally native-born and many of their firms were relatively small.

Because of the area's proximity to rivers and to Boston, the largest group of businessmen were the merchants, who also provided jobs for laborers on the wharves and clerks in mercantile offices. Only about twenty residents reported working at the courthouse and jail, although some listed only as clerks possibly worked in the county offices.

Nearly three quarters of the men held manual jobs, ranging in skill from watchmaking to grease and ash collecting for the soapworks. Nearly half of the manual tradesmen were skilled craftsmen and artisans receiving relatively good wages; the largest concentrations were in the building trades and the glassworks.

The high number of skilled workers is typical of mid-19th-century work organization. Most workshops in East Cambridge were fairly small and depended on men who could perform a variety of tasks. Even the largest firms used production techniques that centered on the skills and knowledge of craftsmen. Only in the processing industries, such as meatpacking and soapmaking, did semiskilled or unskilled workers form the main work force. This would change later in the century, as

	Number	*Percent*
Professionals	19	2.1
Manufacturers, major officials	24	2.6
Merchants, proprietors	87	8.8
Clerks, bookkeepers	67	7.1
Salesmen	20	3.0
Skilled workers	328	34.0
Semiskilled and factory workers	235	25.0
Service and public workers	36	4.5
Laborers	136	14.0
Total	952	100.0

Table 1. Occupation of East Cambridge men in 1850, from the U.S. Census

	Number	*Percent*
Massachusetts	812	40.0
Other United States	495	24.3
Ireland	454	22.3
England	102	5.1
Canada	110	5.4
Scotland	35	2.0
Germany	20	1.0
France	7	0.4
Other	3	0.2
Total	2,038	100.0

Table 2. Place of birth of East Cambridge adults in 1850, from the U.S. Census

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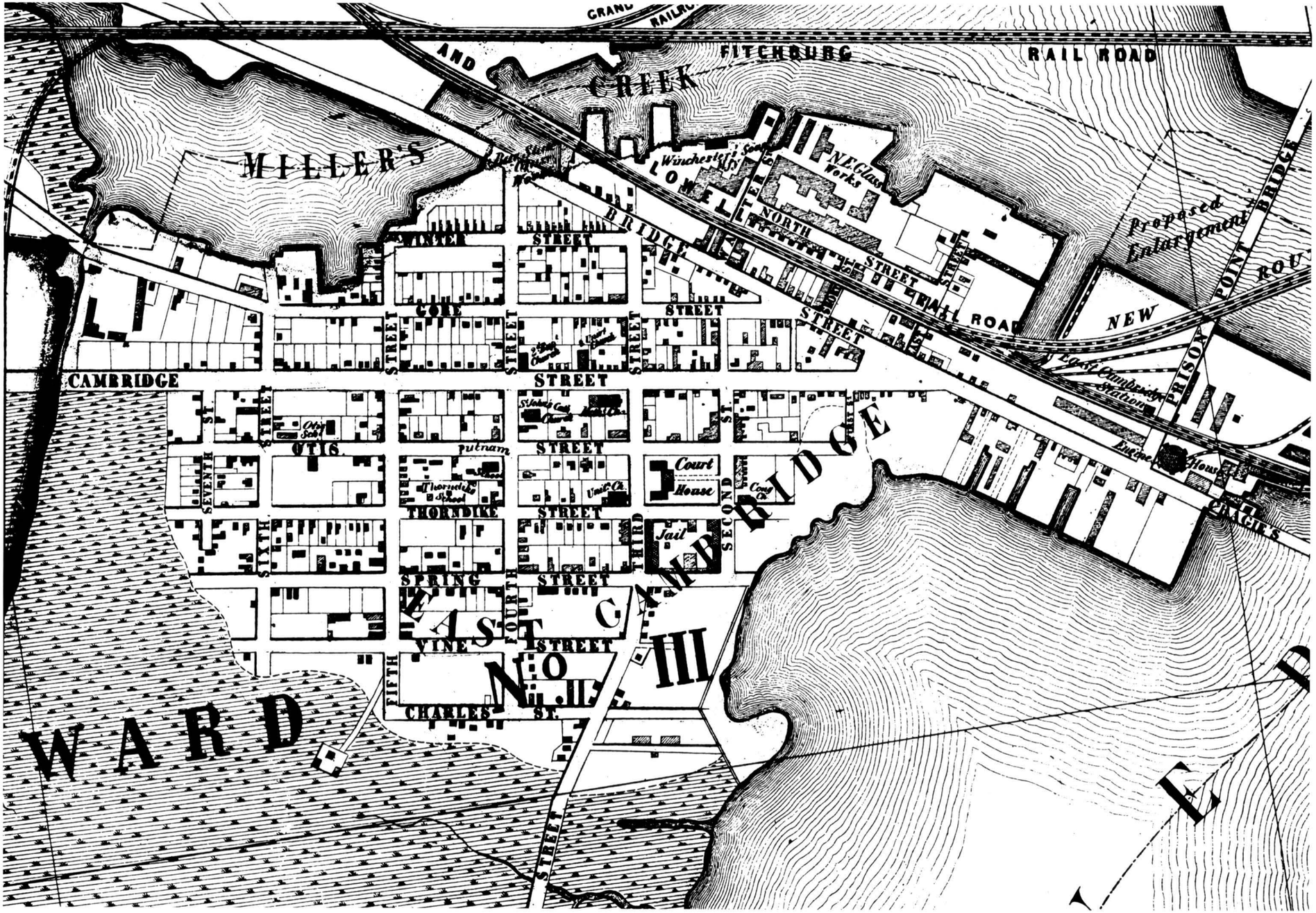

437. East Cambridge in 1854

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machine technologies replaced the craftsman's skills.

The common laborers, 88 percent of whom were foreign-born, formed a relatively large group at the bottom of the occupational ladder. For some men, laboring provided a doorway to industrial experience and ultimately a better job, but many were never able to rise in the work force or achieve any kind of job stability.

More than a third of East Cambridge residents in 1850 were born outside the United States (Table 2). By far the largest foreign-born group was the Irish, who made up one of every five adults. The rest of the foreign-born adults together equaled less than the Irish alone. But unlike the Irish, most of whom came from agricultural areas, many of the other immigrants were already skilled and found a ready market for their knowledge of construction, metalworking, or glassmaking. The majority of the Canadians, Germans, English, and Scots held jobs in skilled trades or in the factories, compared to 34 percent of the Irish.

Many immigrants did not come directly to the United States but sought work first in other countries before deciding to come to the United States. The 1850 census shows a significant number of children of Irish immigrants born in Canada and England, indicating several family moves.

By comparing information on occupation and national origin from the 1850 census with 1849 and 1851 city directory listings, it is possible to see how important these factors were in people's choices of where to live. For this study, East Cambridge was divided into five areas. The northernmost streets, from Bridge Street north, contained workers' houses as well as factories, lumberyards, and wharves along the Miller's River. South of Bridge Street, the dense neighborhood of single-family houses on Gore and Winter streets was settled in the 1830s. Cambridge Street was considered separately because of its importance as the main commercial route from Old Cambridge to Boston. Otis and Thorndike streets run across the hill, and the good drainage and water at the top attracted residences that were generally larger and more elaborate than elsewhere in East Cambridge. On the south, Spring Street and the cross streets which ran down into the salt marshes remained largely undeveloped until the late 1870s (Fig. 437).

Nearly half of the laborers and semiskilled factory and service workers lived north of Cambridge Street near the factories. Forty percent of all laborers were concentrated north of Bridge Street near the New England Glass Company, Winchester's soap factory, and the lumberyards. Another 25 percent lived on the southern periphery, along Spring, Vine (now Hurley), and Charles streets, near the marsh. These fringe areas north and south were very densely settled and held 70 percent of East Cambridge's dwellings with three or more families. Inexpensive housing and proximity to work no doubt encouraged laborers to settle there.

In this period, professionals and manufacturers preferred to live on Cambridge Street, the business center. Only one out of the forty-six listed in the 1849 city directory lived north of Cambridge Street; 41 percent lived on Cambridge Street itself, and 21 percent lived on Otis and Thorndike streets. After the Civil War, Otis and Thorndike streets became the preserve of East Cambridge's upper middle class, but in 1850 more clerks and skilled workers than manufacturers and proprietors lived there. At the same time, Gore and Winter streets, which contained the largest concentration of worker's cottages, housed a healthy mixture of proprietors, clerks, skilled craftsmen, factory workers, and laborers.

While laborers predictably lived on the edges of East Cambridge and manufacturers lived on the hill, for the other occupational groups (including small proprietors, clerks, salespeople, and skilled manual workers), no strong residential patterns emerged, although Gore and Winter streets were most popular among skilled and semiskilled factory workers. This arrangement may reflect what has been observed about social class in the first half of the 19th century: the skilled worker thought of himself as the social equal of all but the wealthiest merchant or capitalist, while the laborer was considered the equal of none. The equality of productive labor, rather than the distinctions between manual and nonmanual occupations, seemed to shape East Cambridge's neighborhoods in this period. Thus a craftsman, glass engraver, or carpenter was as likely to live on Otis or Thorndike Street as a salesman or factory superintendent. Similarly, the same proportion of public officials and proprietors of small shops lived on or north of Bridge Street as did factory and service workers. Occupation, then, was not decisive in choosing where to live, except for laborers who could afford homes only on the margins of the community. By the 1870s, the neighborhoods would display a much clearer separation of manual and white-collar workers.

Ethnicity was the other factor studied. In 1850, more than half of those living on and north of Bridge Street and almost a third of those living on and south of Spring Street were Irish. This meant that two thirds of all Irish-born residents were living in these two areas. In fact, every person living on North Street next to the glass factory was Irish. No other ethnic or native group was as concentrated. Many of these Irish were laborers, so that ethnicity and occupation combined to produce neighborhoods of predominantly Irish laborers near the factories north of Bridge Street and on the southern fringes of the community.

Ethnic background had little effect on residential choice for those who were not laborers. Almost half of the skilled Irish workers lived on Gore, Winter, and Cambridge streets along with a mixture of professionals, manufacturers, and other skilled workers of all backgrounds, both native and foreign-born. Holding a good job thus enabled immigrants to join others of similar status.

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The Experience of Glassworkers, 1849–73

I got out of the car and entered the factory. As I was about to pass through the entrance, I was stopped by the guard, and in response to their questioning I showed them my letter, whereupon I was directed to the Office of the factory. Arriving there, one of the office-holders took the letter and called the manager of the grindery. When he arrived, I was left with him and he took me to his room where he showed me the workplace but without the machine and the accessories. Here my predecessor named Opitz used to work and here I was supposed to start working now. On the table were sitting several unfinished carafes which I was told to finish. The foreman asked me or rather had the interpreter, the glasscutter Eugen Scheffler from Theresienstadt in Bohemia, ask me if I wanted to start working that very day. I asked him to tell him that my tool chest was still in Boston whereupon he immediately asked a coachman of the factory to drive there with me and fetch the box with me. . . . Back at the factory, I went in again to ask Scheffler if he didn't know of a German boarding house for me, whereupon he said I could board with the family where he had room and board. . . . From this day on, therefore, I was a boarder at Herr Vogel's at 10 Vine Street, East Cambridge. The next morning I got out my tools and went to the factory. After I had set up my machine, I began to work at the New England Glass Company in East Cambridge, state of Massachusetts, on April 9, 1851.

H. F. Louis Vaupel, Kurze Biographie meiner selbst (Short Biography of Myself), Vol. I

Thus began the East Cambridge career of Louis Vaupel (1824–1903), a German from Lower Saxony who came to the United States in 1850 and to East Cambridge in 1851. Arriving at the factory at the beginning of its period of greatest success, Vaupel soon became the chief engraver at the New England Glass Company; he remained until the factory closed in 1888 (Figs. 438–439).

Vaupel is known today for his exquisite engraved glass, examples of which are in museums throughout the country (see Fig. 357). He is equally important for the diary he left describing his work, his living situation, and his assimilation into American society. Although his experience was highly personal, it sheds light on the workings of the factory and the experience of glassworkers in East Cambridge.

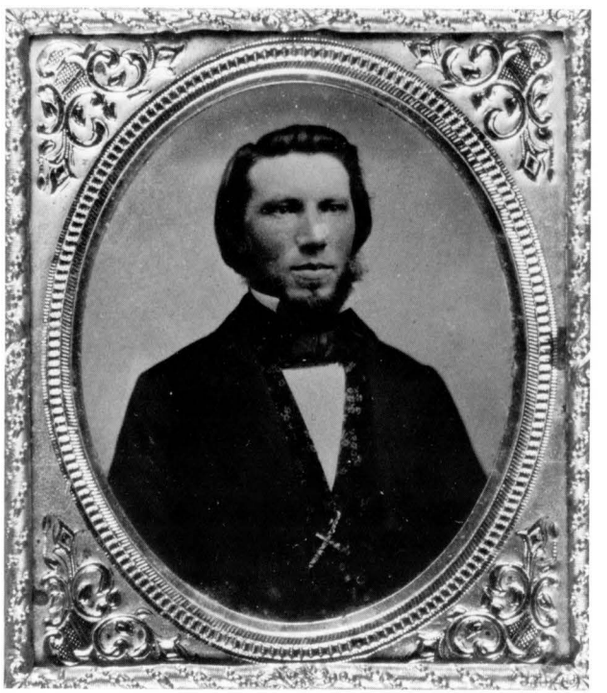
Of all the industries and trades in East Cambridge at midcentury, glassmaking employed the most people and played the largest role in establishing the social and architectural character of the area. Many buildings and, indeed, whole streets, such as Winter Street, were put up to house the industry's work force. By 1865, 650 people, including glassworkers, machinists, carpenters, furnace tenders, and laborers, were directly employed by the glass industry.

A study of six city directories between 1849 and 1873 and the censuses of 1850 and 1860 yielded information about the glassworkers. Between 1850 and 1860, the number of skilled glassworkers reported by the census to be living in East Cambridge rose from 120 to 348. In 1850, it was a relatively young group; their average age was 30, and most glassblowers were in their twenties. By 1860, the average age of glassworkers was 36, but many were 18 or younger, and the youngest was only 13. In 1850, slightly more than half the glassworkers were immigrants, and of them, 52 percent were from England and Scotland and 18 percent were from Ireland. By 1860, the percentages were reversed; only 22 percent were English or Scottish and 61 percent were Irish.

Many glassworkers were single, reflecting the recruiting policies of the companies. A manager of a Pittsburgh glass company was heard to say that "married gaffers breed like minks" (Palmer, p. 24), and presumably demanded higher salaries. Most single glassworkers lived in boardinghouses or boarded with families. Few glassworkers in 1850 and even fewer in 1860 reported owning real estate.

The glassworkers were a fluid population, reflecting the greater mobility of single men. Very few of them spent their entire working lives in East Cambridge. During the 1850s, 30 percent of the glassworkers could be expected to move away within a year of their arrival. Since employment was growing, the companies were constantly having to replace their workers.

In 1849, five streets — Gore, Winter, Otis, Thorndike, and Spring — accounted for two thirds of the glassworkers' residences, although the 85 glassworkers listed in the directory lived on nearly every street. The modest houses and worker's cottages on Gore and Winter streets alone housed 42 percent of the glassworkers' families and was the center of their



438. Louis Vaupel, c. 1855

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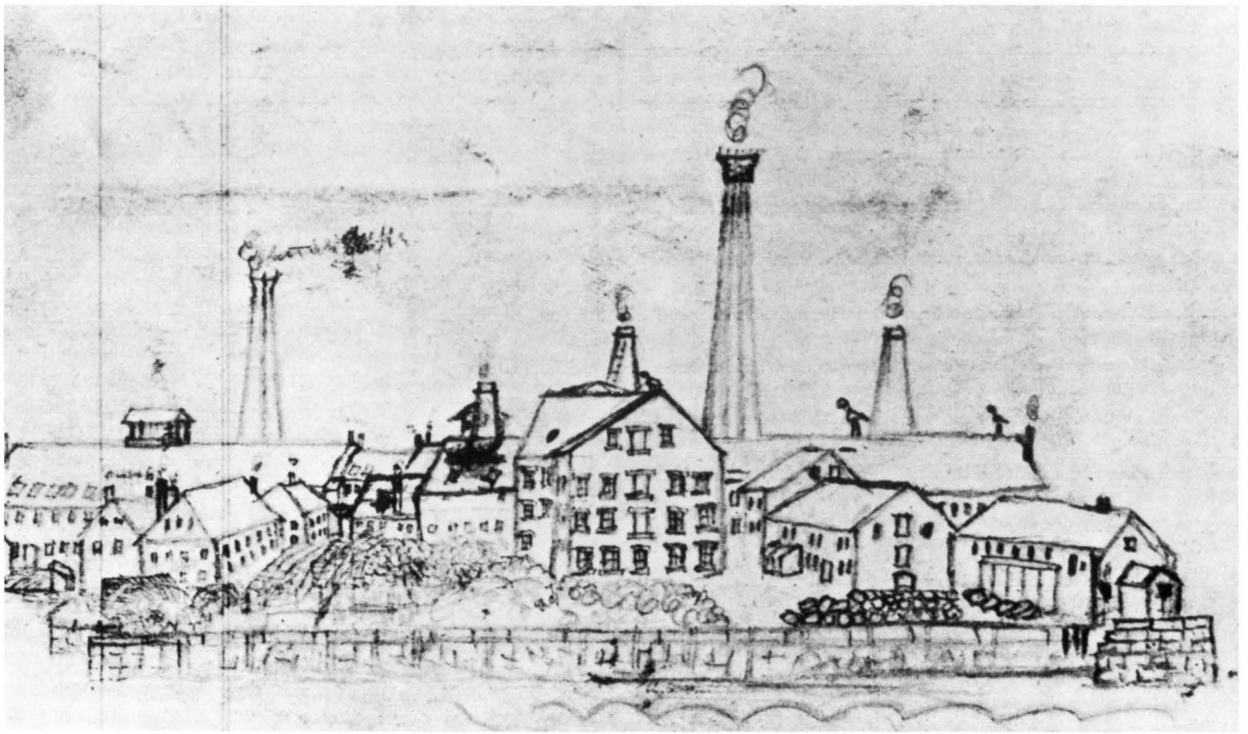
community. Another 18 percent lived along Otis and Thorndike streets, which can be characterized as middle- and upper-middle-class streets. Otis and Thorndike were long streets and sections could have been stratified by class, but the evidence suggests that this did not happen until later. Architecturally, these streets were mixed, and the directories indicate that occupationally the streets were mixed as well.

No other streets had as many glassworkers, and some streets that could have been expected to attract them did not. Only four glassworkers were reported living on Bridge and East streets, close to the glass factories, and there were none on North Street, next to New England Glass. Each of these streets had a heavy concentration of general laborers, some of whom probably found employment in the glassworks, but the glassworkers probably could afford to live away from the smoke of the factories and the stench of the Miller's River.

During the 1850s, the proportion of glassworkers on most residential streets remained about the same, although their overall number almost doubled. This means that new glassworkers chose the same residential locations as their predecessors. All lived in private houses; the companies provided no housing.

Not only did glassworkers move in and out of East Cambridge with some frequency, but they also moved often within the neighborhood. This seems to have been particularly true of the bachelors. Vaupel's case provides a good example. Louis Vaupel was single when he came to East Cambridge in 1851, and during his first two years he moved six times, usually living with other skilled German craftsmen, not necessarily glassworkers. For him, as for many early immigrants, it seemed more important to be with others of his nationality than with people in his own trade. Vaupel's first wages were $2 per day, and he paid $2.50 per week for room and board, a usual rate. The houses he boarded in were mostly on Spring Street and south; he never lived on Gore or Winter streets, and he usually moved because of bad water, poor food, unclean conditions, or dampness.

In 1860, Vaupel was married with two children and a third on the way when he rented 124 Thorndike Street, a one-and-a-half-story worker's cottage built in the 1840s (see Fig. 169). By this time, the company of glassworkers seemed important to him. The house was owned by a glassworker and another engraver lived next door. Four years later, he bought it. Although he had been head of New England Glass Company's engraving department for eleven years and had received national recognition, his house was no different from those occupied by glassworkers twenty and thirty years earlier. It was also small for a family of five. Vaupel's purchase shows the continued popularity of this house type for East Cambridge glassworkers throughout the life of the factory.



439. Sketch of the New England Glass Company, by Louis Vaupel, 1851

A map of glassworkers' houses in 1857 (Fig. 440) shows that residential patterns had changed little since 1849, in spite of the vastly expanded work force. Some 45 percent of glassworkers continued to live on Gore and Winter streets, and the remainder were scattered throughout East Cambridge. A major change, however, occurred on Otis and Thorndike streets, where the proportions of glassworkers dropped substantially, to only 2 and 3 percent of the total. No other street showed such a dramatic change. Only one glass employee now lived on the hill, the most desirable part of Otis Street; he was a Bay State Glass Company official who owned half of a Greek Revival house at 71–73 Otis Street. One possible explanation is that East Cambridge was beginning to develop more of an industrial culture, in which the social and residential distinctions between manual and nonmanual labor were becoming greater.

By 1873, East Cambridge's residential development was nearly complete, and the clusters of glassworkers generally conformed to the trends seen first in 1857

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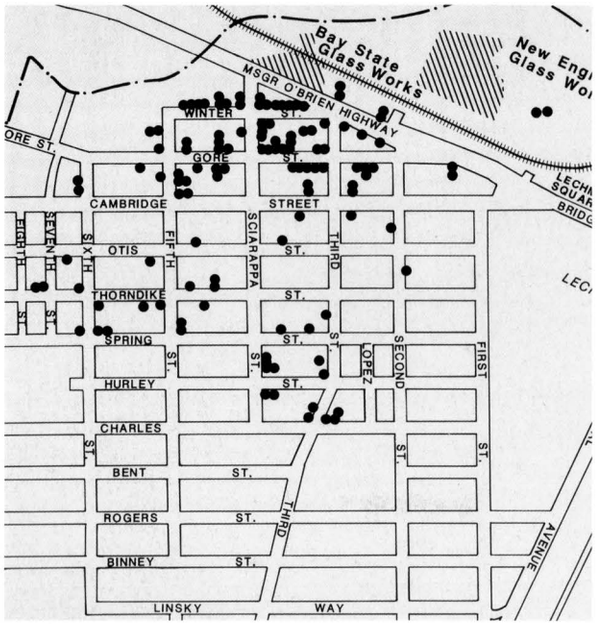

440. Glassworkers' residences in 1857

441. Glassworkers' residences in 1873

(Fig. 441). The glass industry was beginning to decline; employment was dropping, and many of the most skilled workers left the area.

As in 1857, few glassworkers lived on either Otis or Thorndike Street, and only those in managerial positions lived in the middle-class blocks on the hill. More than half of all the remaining skilled workers now lived north of Cambridge Street, mostly on Gore and Winter streets, but more glassworkers than ever also lived on the most northern streets near the glass factories, along with most of the laborers.

The most significant movement was to the south along Charles, Spring, and Vine streets. Although they were farthest from the factories, these streets housed almost 20 percent of glassworkers in 1873 compared to only 7 percent in 1849. The southern streets were now more livable: the marsh was being filled in, and many new multifamily dwellings had been constructed.

Highly skilled craftsmen (cutters, blowers, and engravers) were now fairly evenly distributed throughout East Cambridge, although a skilled glassworker was three times more likely to be living north of Cambridge Street in 1873 than he was in 1849. The major distinction was between manual and other occupations rather than among different classes of manual workers. Over this period, there was a clear shift of management toward Otis and Thorndike streets. By 1873, the glass manufacturers had all moved from Cambridge Street to Otis and Thorndike streets, where most houses were owner occupied.

In spite of these changes, the glassworkers' preference for particular types of houses remained the same. Many glassworkers continued to live in worker's cottages between Thorndike and Winter streets or in simple Greek Revival houses between Spring and Gore streets. Even on Otis and Thorndike streets, glassworkers generally chose the older Greek Revival rather than the more up-to-date Mansard houses. Although many multifamily houses — in which units were divided horizontally into flats — were built in the late 1860s and 1870s, they were not popular with glassworkers, who continued to prefer single-family houses.

By 1879, the glass industry had been surpassed by furniture making and meatpacking. Many skilled workers, even those who had spent their entire careers at New England Glass, had been forced to leave or accept drastically reduced salaries. Some found jobs in other local industries, but others moved from factory to factory and state to state in search of work. For example, Joseph Moran, Jr., a glassblower who left in the early 1880s, took his family to Connecticut, West Virginia, Pennsylvania, and Ohio before abandoning the trade and returning to East Cambridge in 1896 to open a restaurant (Fig. 442).

442. Joseph A. Moran, Sr., a former glassblower, with his grandchildren on Fourth Street, c. 1905

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Postwar Changes

443. 218–222 Cambridge Street, looking toward the courthouse. Photograph c. 1897

By 1860, the population of East Cambridge had passed 7,000, but it maintained its village atmosphere with only about twenty-five stores and workshops along Cambridge Street and only three or four policemen in civilian dress patrolling the streets (Fig. 443). Although Irish immigration continued at a strong pace, the percentage of Irish remained approximately one quarter of the total population. Development ceased during the Civil War, and the population increased by less than 100 between 1860 and 1865. The *Chronicle* in 1860 reported so many unoccupied tenements in the city that property owners had little incentive to invest in new buildings.

After the war, growth resumed and the population soared. Almost 2,000 people settled in East Cambridge between 1865 and 1870, causing a severe housing shortage. Those who built houses were congratulated in the *Chronicle* in 1867 for "helping to supply the great want of families who desire to reside here." Soon many were building, and almost 350 new dwelling units were added between 1865 and 1870 alone, primarily in row houses and tenements (Fig. 444).

The *Chronicle* in 1875 noted "momentous changes in general appearance, character of business and inhabitants" in East Cambridge over the previous fifteen years. This period was the last to see much residential building. By 1873, most residential streets on the upland were filled (Figs. 445–446), and building activity generally moved west and south to the poorly drained areas that had been marsh or bordered on it. Seventh, Eighth, and Ninth streets to the west and Vine and Charles streets to the south were now filling with tenements that gave them a different appearance from the clusters of small single-family dwellings on the older streets (Fig. 447). The fringes also differed socially and economically, as they attracted day laborers and semi-skilled factory workers.

As tenements proliferated, East Cambridge rapidly became the most densely populated neighborhood in the city. Even with the newly filled land, it was by far the smallest ward, but it had the second largest population. The 1870 census listed 1,830 families (more than 9,000 individuals) housed in 1,300 dwelling units,

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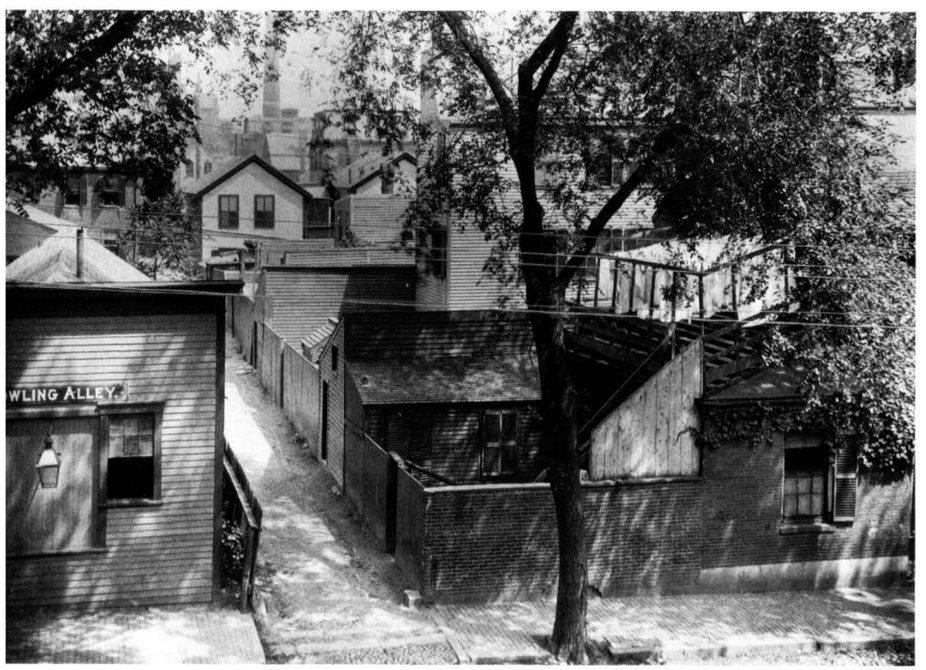
444. Tenements on the north side of Cambridge Street at Lechmere Square. From right, 69–95 (1892), 103 (remodeled 1892), and 107 Cambridge Street (c. 1865). All demolished c. 1910 for Lechmere station. Photograph 1907



445. Backyards between Second and Third streets. All demolished c. 1897 for the Registry of Deeds. Photograph c. 1897

446. East Cambridge in 1873

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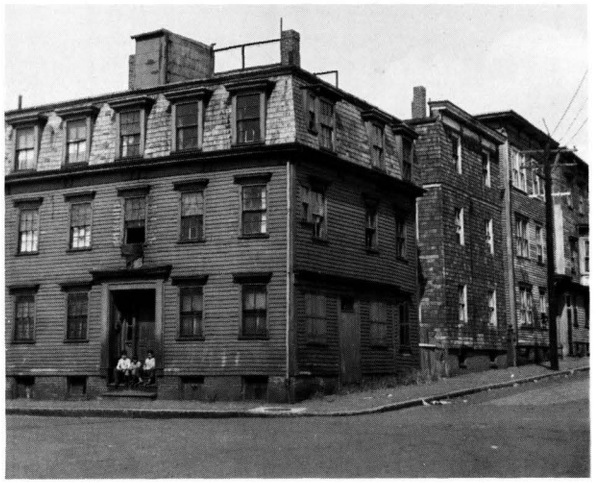

447. 241 Hurley Street, c. 1845, remodeled in 1892

or more than seven persons per dwelling unit, the highest in Cambridge. By comparison, Ward 2, which included Cambridgeport, had only 100 more people in an area more than twice as large.

Although the foreign-born population dropped from a high of 40 percent in 1850 to 36 percent in 1870, this was still higher than in any other section of the city and considerably higher than in the city as a whole. Different nationalities were beginning to move into East Cambridge. At the same time, many older residents began to move out of the neighborhood because of the continued immigration and the pollution in the Miller's River.

The changes in the social structure during this period can be documented by comparing the 1849 and 1873 directories. Under the pressures of immigration, the industrialization of the labor force, and the general population growth, the occupational variety of many streets began to disappear as the century progressed (Table 3).

Many immigrants after 1850 were unskilled, and worked as laborers in a variety of industries. While the proportion of general laborers in the population remained about the same, their residence changed. By 1873, the number living north of Cambridge Street had risen from 54 percent to 67 percent; almost all of this increase occurred on Gore and Winter streets, where skilled glassworkers had originally congregated. A quarter of East Cambridge's laborers now lived on Spring Street and south. In addition, almost half of the semiskilled and service workers now lived north of Cambridge Street, making Gore and Winter streets a solid working-class neighborhood.

Manufacturers and professionals were now concentrated on Otis and Thorndike streets, particularly on the hill between Third and Fifth streets. Many manufacturers and company owners lived on Cambridge Street in 1849, but retail and commercial activity had greatly expanded since then, making the street less desirable. In 1875, the *Chronicle* reported at least 100 stores and workshops there, causing the second generation of businessmen to choose houses on side streets, away from the main thoroughfare. An exception was William Lockhart, the coffin manufacturer, who in 1869 built the elegant Mansard house that still stands at 390–392 Cambridge Street (Fig. 448). Generally, though, a quiet, healthful location seems to have been more important to this group than an up-to-date house. Those who did not move to Dana Hill or North Avenue preferred to live in Greek Revival and Italianate houses on Otis and Thorndike streets rather than build

	Bridge and north		*Gore and Winter*		*Cambridge Street*		*Otis and Thorndike*		*Spring and south*	
Occupational groups	1849	1873	1849	1873	1849	1873	1849	1873	1849	1873
Manufacturers, professionals, major officials	3	2	3	6	19	21	13	29	8	10
Petty managers, proprietors, officials	13	19	16	21	23	47	18	62	10	25
Clerical, sales	6	9	4	23	6	38	6	55	5	41
Skilled factory, craft workers	33	126	71	214	54	104	50	91	53	181
Factory workers, semi-skilled, service workers	20	102	44	105	28	48	19	36	21	153
Laborers	46	137	25	104	29	27	5	9	26	85
Not in labor force, or occupation unknown	21	66	29	53	34	35	33	39	30	67
Area totals	142	461	192	526	193	320	144	321	153	562

Table 3. Occupational characteristics of East Cambridge neighborhoods, from the 1849 and 1873 directories

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new homes on the poorly drained southern and western streets.

The strong correlation between the healthfulness of a location and its residential desirability is most apparent on the southern margin of the old upland. Between 1849 and 1873, Spring, Vine, and Charles streets were developed as marshland was filled and it became profitable to build row houses and tenements for rent. The area's population increased almost fourfold over this period. Of the employed residents on Spring Street in 1873, 39 percent were skilled craftsmen, 30 percent were semiskilled or unskilled laborers, and the remaining 30 percent included a mixture of professionals (most of whom lived on the upland near Third Street), clerks, and proprietors. Farther south this balance changed, and the proportion of semiskilled and unskilled workers increased to 60 percent on Charles Street.

The greatest change in 1873 was in the residential locations for the middle groups — proprietors and officials, skilled workers, and the growing numbers of clerical and sales people. Few in this category now lived north of Cambridge Street, with the exception of certain proprietors of small grocery, dry goods, and clothing stores or other businesses on these streets. The long hours tied these men to their work, and they often lived over or near their shops (Fig. 449). But those whose businesses did not demand their constant presence tended to choose other areas, and 36 percent of all proprietors and officials now lived on Otis and Thorndike streets. Similarly, clerical and sales workers no longer settled north of Bridge Street.

Skilled workers and craftsmen were the largest occupational group in East Cambridge in both 1849 and 1873. Only this group was still found throughout the neighborhood, supporting historians' findings that skilled workers' social and cultural organization spanned both the working and middle classes. Even so, skilled workers were more likely to have lived near managers and clerks in 1849 than in 1873. In 1849, more skilled workers lived on Otis and Thorndike streets than on Bridge Street or north; the reverse was true in 1873.

Thus, between 1849 and 1873 a sorting process had begun in East Cambridge's residential neighborhoods. Manual workers at all levels, but especially craftsmen and skilled factory workers, had shifted their residences toward the north and south fringes of the area, while manufacturers, managers, and clerks lived almost exclusively on Cambridge, Otis, and Thorndike streets in the center of the community. Class segregation in 1873 was by no means complete, but it was much more apparent than in 1849.

448. William L. Lockhart House, 390–392 Cambridge Street, 1869. Photograph c. 1880

449. Moses Susser, gentlemen's furnishings, 525 Cambridge Street. Photograph c. 1890

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The Zone of Emergence

Toward the end of the century, East Cambridge experienced a radical shift in social structure. New nationalities arrived in rapid succession, driving out the Yankees and challenging the Irish. By 1920, the long Irish dominance was ending, and the Portuguese, Poles, and Italians were growing stronger. This succession of nationalities was first described in *The Zone of Emergence*, a study of several neighborhoods around Boston written between 1905 and 1914. Eugene Sheldon and Ordway Tead, who wrote the East Cambridge chapter, provide an invaluable contemporary assessment of life and working conditions at this period.

After 1873, the population of East Cambridge grew too large to permit the kind of detailed directory and census research on individuals done for the period 1849–73. However, census reports, newspaper articles, industrial statistics, and church and organization records help document some of the changes that occurred between 1873 and 1900.

Population changes were clearly reflected in the growth of new churches and the waning of others. This trend continued into the 20th century, as older families left and the Italians, Polish, and Portuguese grew numerous enough to form their own congregations. During the first half of the 19th century, one Catholic and five Protestant churches had been built, but by 1875 most of the Protestant congregations were shrinking, while the Catholics needed more space. The *Chronicle* reported in 1875 that "the Unitarian and Orthodox societies, once large and composed of the most prominent and influential citizens, would not if united, fill more than a dozen pews, while the Baptist and Universalist societies do not number one half what they once did."

That year, the Unitarians moved to Cambridgeport, and their East Cambridge church became an Episcopal mission, serving the needs of new, less affluent immigrants. Only the Methodists, East Cambridge's oldest Protestant group, continued in strength at this period, probably because of the large numbers of skilled craftsmen of English descent who remained in the area.

The largest religious group by far, the Roman Catholics, reflected the growing numbers of Irish. When St. John's was built in 1842, it was the only Catholic church in Cambridge and Somerville, but attendance increased steadily even after new parishes were created in both cities. The successful drive to build Sacred Heart Church revealed the strength of the Catholic community (Fig. 450). In 1873, a personal, house-to-house solicitation by Father John O'Brien raised $13,000 in ten months. Contributions ranged from 50 cents to $100, but most were $10 to $20, from workers earning $9 to $10 a week. While the contributors were scattered throughout the area, almost half lived on or north of Cambridge Street, the area that housed the largest concentration of working-class Irish, and many worked as laborers or held semiskilled jobs. By contrast, less than 3 percent lived on Otis and Thorndike streets.

Immigrants continued to arrive, pushing the population to 10,134 in 1880. Of this number, almost 80 percent had two foreign-born parents and 36 percent were foreign-born themselves. East Cambridge in 1880 had a larger percentage of persons with foreign parentage than any other ward in the city. An 1877 bird's-eye view shows how densely the area was built up, with 1,467 dwellings housing 2,079 (Fig. 451). The largest foreign-born group was still the Irish, with 2,012 residents (55 percent of the foreign-born), followed by the Canadians with 674 (19 percent), the Germans with 294 (8 percent), and the Portuguese with 105 (3 percent). Although a few Portuguese had settled in East Cambridge as early as 1865, larger numbers were just beginning to arrive, primarily to work in the furniture factories and the meatpacking plants.

Some things had not changed. The Irish continued to live on the fringes of the neighborhood. The 1880 census shows that 45 percent of the families on North and Winter streets had Irish-born heads, many of whom were teamsters or worked in the Revere Sugar refinery nearby. Close to the marsh, 78 percent of the heads of household on Charles Street were of Irish descent and 60 percent had been born in Ireland, a very heavy concentration. Only 1 percent had two native parents. Most households on Charles Street were living in rented flats or houses; few owned their homes.

Spring Street, on the upland, showed more variety in both nationalities and occupations. Only 25 percent of the working residents were Irish and 37 percent were native, but there were now more laborers and

SOLEMN

DEDICATION

OF THE

CHURCH

OF THE

SACRED HEART

EAST CAMBRIDGE.

SUNDAY, JANUARY 28, 1883.

Corner Stone laid Oct. 4,'74. Basement opened for Divine Service, Nov. 12,'76

PASTOR, REV. JOHN O'BRIEN.

ASSISTANTS:

REV. FRANCIS S. WILSON. REV. JOHN W. GALLIGAN.

REV. PATRICK H. J. CALLANAN.

450. Dedication program, Sacred Heart Church, 1883

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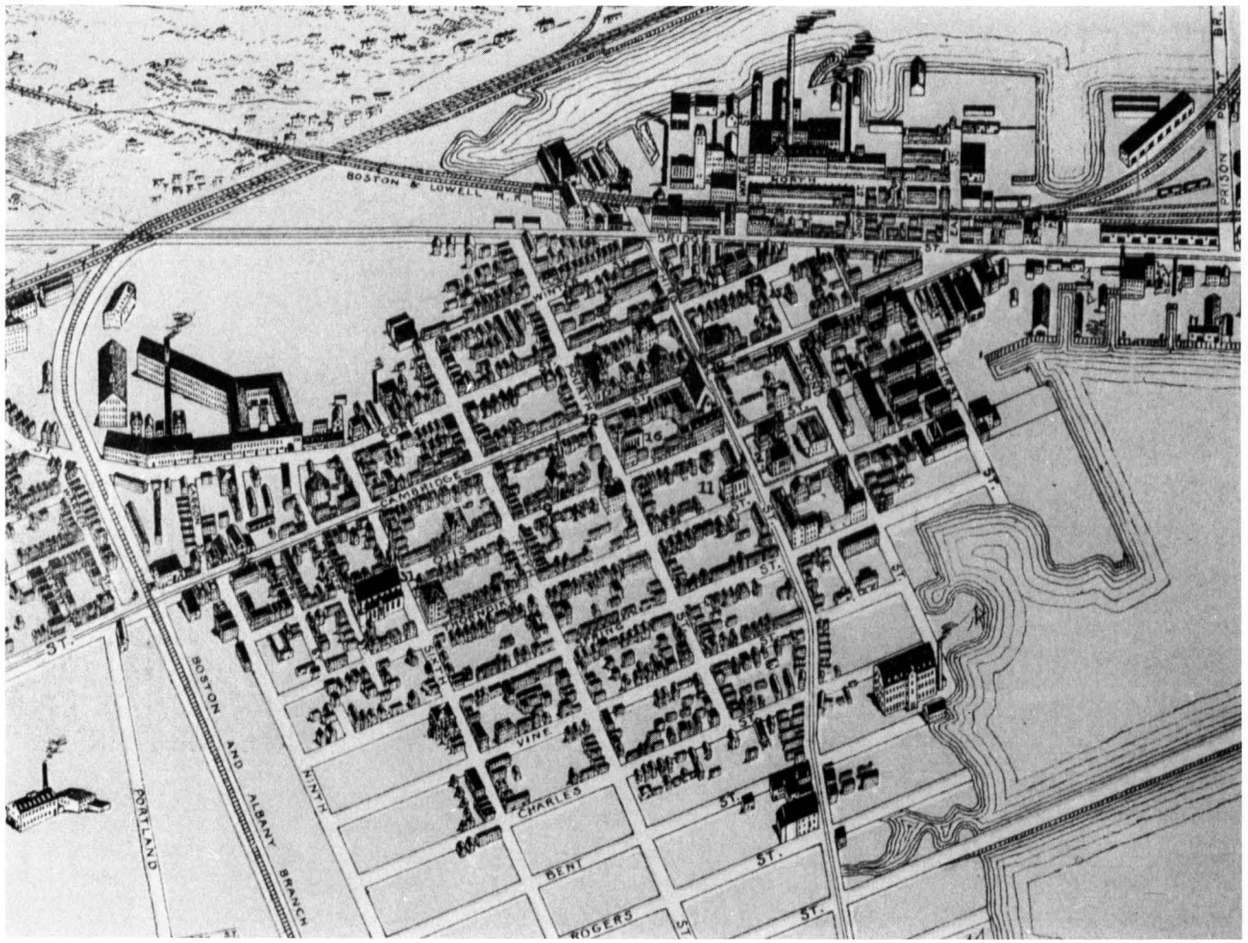

451. Bird's-eye view of East Cambridge, 1877

fewer professionals and sales and clerical workers than in 1873. A 1912 study estimated that 70 percent of the work force was unskilled, and the 1880 figures anticipate this trend.

Some of the residents of these fringe streets worked in the furniture factories that had traditionally used both highly skilled craftsmen and unskilled labor. Many worked at Squire's vast meatpacking plant on Gore Street, which employed more unskilled and semiskilled workers than any other industry in the area. While the furniture industry required highly skilled craftsmen, slaughterhouse work was often brutal and dangerous, and jobs there were taken by the most recent immigrants.

Squire's was the scene of a bitter strike called by the Knights of Labor in 1886. John P. Squire insisted that the men give up the right to strike as a condition of being allowed to return to work. Mayor Russell and Father O'Brien of Sacred Heart intervened to end the lock-out, but conditions at the plant remained difficult. Squire's provided some housing near the factory, 18 units in three rows off Gore Street built in 1868 that were condemned and demolished in the early 1940s (Fig. 452). There was also a company store, the Miller's River Market, which was charged with exploiting the workers by charging ruinous terms for credit. By 1900, regular English classes sponsored by the YMCA were held at the factory during the lunch hour (Fig. 453).

Only one other company in East Cambridge provided housing, and immigrants and new employees depended on their co-workers and on ethnic and church organizations to help find places to live. The 1873 and 1874 directories list nineteen boardinghouses in East Cambridge, including two German ones. The 1880 directory lists twelve boardinghouses, but there were also many informal boarding situations in family homes evident in the census. Well into the 20th century, boarding with families remained the easiest and least expensive way to find housing. It was also the easiest way for families to meet their rent or mortgage payments. However, it often produced overcrowded living conditions; the 1900 census indicates that almost 20 percent of the tiny worker's cottages on Winter Street took in boarders.

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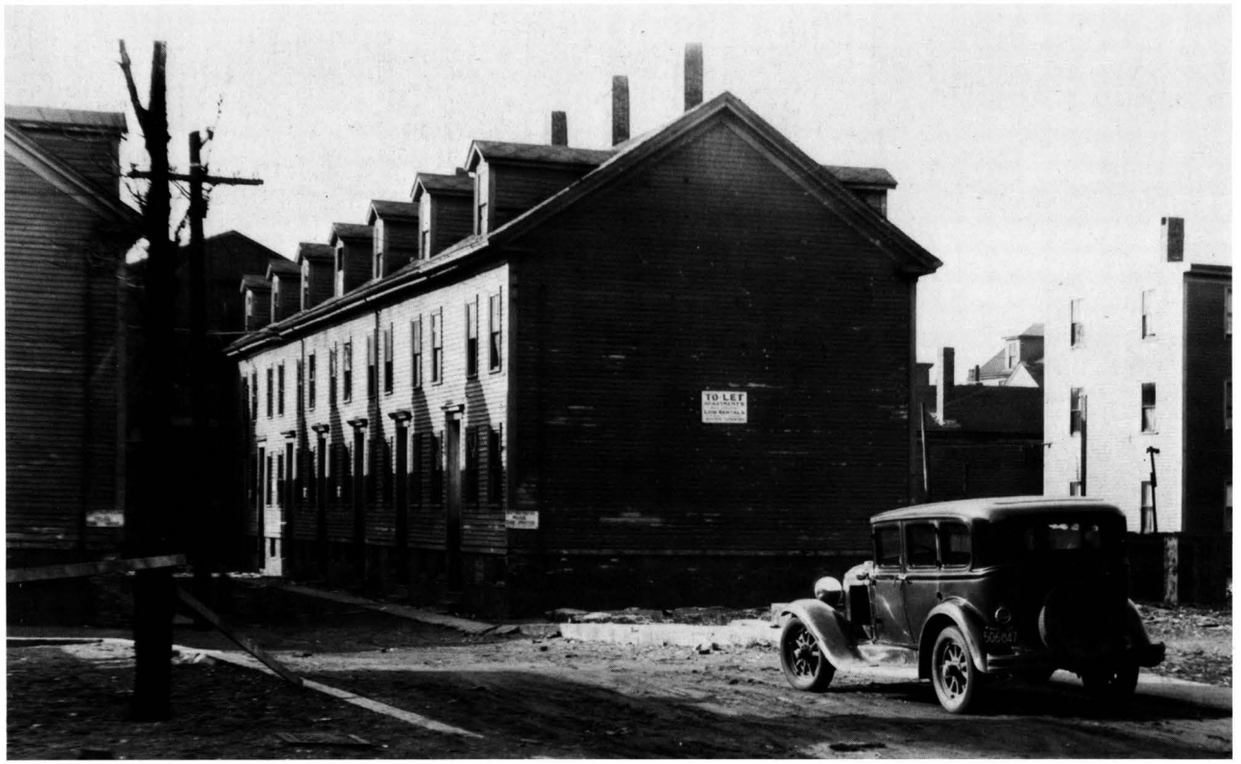
While Sacred Heart Church and St. John's Literary Institute were major forces in the Irish community in the second half of the century, smaller national groups also formed community associations and churches. The German experience was typical. Although Germans made up only 8 percent of the foreign-born population in 1880, they had established in the 1850s a patriotic club, a singing club (the Concordia Musical Society), and a chapter of the Harugari, all of which were thriving in the 1880s. The reasons for joining an organization were sometimes mixed. Louis Vaupel wrote that he had been invited by his foreman at the glass company to join the Odd Fellows. Vaupel had been involved with several German clubs since the 1850s but had always declined invitations to join lodges, even German ones, because he "was not much in sympathy with such secret societies." But in this case, his decision had more to do with his work situation than the organization itself, and he said, "I made up my mind to follow my foreman's invitation for this reason: because he could contribute much to my earnings and welfare" (Vaupel, vol. II, p. 113). In 1883, Vaupel reluctantly agreed to run for the legislature, and the German community, meeting in Harugari Hall, was encouraged to vote as a bloc for their candidate. In the end, he reported, he was not successful, as the Irish candidate had a larger constituency, but his experience shows how important ethnic ties continued to be.

For the Portuguese, as for the Germans, language was a barrier, and ethnic organizations played a large role in acclimating new residents (Fig. 454). As early as 1881, the Portuguese community had its own club, the Gremio Lusitando de Beneficenda, which met weekly. Many of the Portuguese came to work in the furniture factories, while others worked in the meat-packing plants, the oiled clothing factory, or at day labor. For the Portuguese, life was considerably better than in Boston's crowded North End, where their church was; for those who came directly from Portugal, East Cambridge offered more opportunities, particularly for the children.

The 1895 state census counted 81,643 in the city and 13,996 in East Cambridge. Much of the increase was spurred by new industries that offered employ-



452. Squire's Court, off Gore Street. Photograph 1940

453. Noon class at John P. Squire & Company. Photograph c.1900

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454. YMCA class at the Luso-American Club, c. 1910

455. Wedding party of John and Katherine Serafinowicz, St. Hedwig's Church, 1913

ment to large numbers of foreign workers. To house this influx, the *Chronicle* reported that more building was taking place in East Cambridge in 1889 than for several years before. Described as "dwelling houses of moderate cost for rent, for which there is a great demand," these tenements and rows were primarily on the edges of the former marsh, on such streets as Ninth and Parnell (now Max Avenue).

After the turn of the century, more immigrants came directly from abroad. In 1900, the economies of Poland and Russia suffered a severe depression, and many Poles and Russian Jews settled in East Cambridge. Within a few years the Polish, Portuguese, and Italian Catholic populations had become large enough to break away from Sacred Heart and establish their own churches. As the new groups became established, many tended to stay close to East Cambridge, moving across the tracks into the new three-decker neighborhoods east of Inman Square. At this time, the more successful Irish families were moving to suburban North Cambridge, Somerville, and Arlington.

In 1907, approximately 100 Polish Roman Catholic families purchased the Second Universalist Church on Otis Street and transformed it into St. Hedwig's. Many Polish organizations met in the basement; some were religious and others had a social, literary, or self-help focus. A young men's society worked with the Cambridge YMCA to provide English classes, and a political club encouraged naturalization. In 1911 alone, thirty-seven Polish weddings took place (Fig. 455). As soon as they could, the Poles started neighborhood businesses and bought houses, particularly on the side streets such as Seventh Street, although some began moving onto the hill near the church.

In 1908, the Irish Catholics west of the railroad tracks joined the new parish of St. Patrick's, which in 1909 built a church at York and Berkshire streets. In 1912, the East Cambridge Portuguese joined others in the city to establish St. Anthony's Church on Portland Street. According to the 1920 census, there were now more Portuguese than Irish in the neighborhood.

In 1917, the Italian Catholics formed their own church. Italian immigration to the United States began in the 1890s, but Italians did not begin moving into East Cambridge in any significant numbers until well into the 20th century. *The Zone of Emergence* cites only 200 Italians in East Cambridge in 1912; by 1920, there were 834. Most were southern Italians from Gaeta and Avellino, near Naples. Many came as laborers, but skilled craftsmen found work in the furniture industry (Fig. 456).

Maintaining a sense of community was important to the Italians, and in 1916 they formed Lodge 506 of the Sons of Italy. The only requirement for membership

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was an Italian ancestor or spouse, and for a nominal monthly fee the lodge provided free medical care. At about the same time, some residents petitioned the Franciscan Fathers of St. Leonard's Church in Boston to help them start their own church. At first, several priests were sent to provide part-time services, but by 1917 the community had grown large enough to acquire the Baptist Church on Cambridge Street and convert it to the church of St. Francis of Assisi (see Figs. 293–294). In 1920, a branch of the women's organization Stella d'Italia was established. The growing number of Gaetans sent to Italy for images of St. Cosmas and St. Damien, the patron saints of Gaeta and patrons of medicine. Their arrival in 1927 formed the basis for an annual saints' day festival that remains an important Italian family celebration in East Cambridge.

In 1912, the labor force in East Cambridge was described in *The Zone of Emergence*:

There are about 2,900 men and 700 women who are doing unskilled machine work with wages averaging, for the former $12, and for the latter, $6.50 a week. For the 560 men in positions of skill, the wage approximates $17, and for the 750 women, $9 a week. In nationality the unskilled workers are Irish, Portuguese, and Polish, of the first or second generation; this also holds true of the women and girls. The skilled men — the machinists, woodcarvers, upholsterers, typesetters, etc. — include Americans, the older Irish, Swedes, Germans, and a few Portuguese.

Of the approximate population of 12,000, the authors estimated that 7,000 were Irish, 3,000 Portuguese, 1,200 Polish, 400 American, 200 Italian, and 200 Armenian. Their estimate of 70 percent unskilled workers marks a dramatic transformation from the early 19th century when the first waves of immigration brought skilled craftsmen from England, Scotland, and Germany.

While East Cambridge provided a basically favorable place for recent immigrants, the authors pointed to a number of problems affecting neighborhood life. Among

456. Italian woodcarver, possibly an apprentice. Photograph c. 1920

457. Portuguese and Italian workers in a YMCA literacy class, National Casket Company, c. 1910

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458. Noontime athletic event sponsored by the YMCA at the George F. Blake Company, c. 1925

459. Athletics for girls sponsored by the Cambridge Recreation Department at Thorndike Field, c. 1925

460. "The Midgets," East End Union

these were drunkenness (although Cambridge was dry from 1886 until 1933, Boston was not, except during Prohibition) and the absence of educational opportunities. In 1912, nearly three quarters of the students left after grammar school, and the difficulty of entering the work force at age 14 or 15 in any but the most menial jobs proved demoralizing. Anyone between the ages of 14 and 21 who could not read and write English was required to attend night school, but classes were often overcrowded and ineffective. The noontime classes organized by the YMCA at several factories, including the American Rubber Company, the Blake & Knowles works, and the National Casket Company (Fig. 457), as well as at Squire's, were recognized as effective but inadequate to meet the demand. The authors also recommended more amusements in the neighborhood, although they pointed out that nearly twenty men's organizations and two bowling alleys helped to keep young people off the streets (Figs. 458–459).

The authors of *The Zone of Emergence* were associated with the settlement house movement, which developed in Boston in the 1890s. An important offshoot of that movement, the East End Union, was incorporated in 1889 and erected a building on Burleigh Street, in a neighborhood later cleared for Technology Square. In 1920, the board of the East End Union decided to leave Cambridgeport, where manufacturing was crowding out residences and the population was constantly in flux. In June 1921, it moved to East Cambridge, where it saw the greatest need among the children of new immigrants (Fig. 460). After almost a year in temporary quarters on Fifth Street, it moved in 1922 to a former house at 105–107 Spring Street, which it converted into a settlement house (Fig. 461).

According to the 1920 census, East Cambridge had nearly 5,000 foreign-born residents, including some twenty nationalities but with four main groups: 1,425 Portuguese, 1,103 Irish, 834 Italians, and 614 Polish. The union's annual report in 1923 stated that the Portuguese and Italian populations were rapidly increasing and the Polish slightly decreasing, while the Irish were moving away. Ward I, closest to Boston and the river, housed the most recent immigrants, particularly the Italians and Portuguese, while more established immi-

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461. East End Union, 105–107 Spring Street. Photograph c. 1922–24

grants tended to move gradually into Ward II, west of Fourth Street. In spite of some antagonism from the Irish and a suspicious fire in 1924 that destroyed the Spring Street building, the East End Union and its wide range of services and classes, particularly for children, were warmly welcomed by the immigrant population (Fig. 462). In 1925, the present brick East End Union opened at 105–107 Spring Street, and another chapter in the long history of settlement and assimilation in East Cambridge began (Fig. 463).

Sheldon and Tead summed up the immigrant experience, concluding that

perhaps the most interesting thing of all about East Cambridge is the fact that it embodies in miniature all the aspects of the larger industrial world. . . . The upward thrust of immigration, the usurpation of the lower standards of living by new arrivals, their slow emancipation into a more healthy standard, the industrial exploitation of the unskilled, the lack of organized power in this same group, the careless housing and inadequate schooling . . . these are all here.

462. Homemaking class, East End Union, 1924

463. May Day celebration, East End Union. Photograph c. 1930

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Bibliography

Maps and Atlases

Bache, A. D. "Boston Harbor, Massachusetts," *Survey of the Coast of the United States*. 1857.

Baldwin, James F. "A Plan and Profile of the Boston & Lowell Railroad." Boston, 1836.

Boston & Albany Railroad. "Map of Proposed Industrial Track, East Cambridge." Boston, 1908.

Boston & Lowell Railroad. "Report Made by the Boston & Lowell Railroad of the Location of the Route of their Railroad." Boston, 1832.

"Boston Bay." *Atlantic Neptune*, vol. 2, pt. 2. London, 1775.

"Boston from Willis Creek." *Atlantic Neptune*, vol. 2, pt. 2. London, 1775.

Bromley, G. W. *Atlas of the City of Boston, Charlestown and East Boston*. Philadelphia, 1912.

Bromley, George W. and Walter S. *Atlas of the City of Cambridge, Massachusetts*. Philadelphia, 1894. 2nd ed., 1903; 3rd ed., 1916; 4th ed., 1930.

Chase, J. G. "Plan of Lands in Cambridge Belonging to the East Cambridge Land Company and Other Parties." 1865.

———. "Plan of Lands in Cambridge Belonging to the East Cambridge Land Company." December 1869.

———. "Rail Road Map of all Street and Steam Railroads in Boston and Vicinity." Boston, 1865.

Franklin View Co. *City of Cambridge, Mass.* Boston, 1877.

Fuller, S. P. "Schedule of Unsold Lands Belonging to the Lechmere Point Corporation Surveyed May 25, 1822."

Hales, John G. *Map of Boston and Its Vicinity*. Boston, 1819. 2nd ed., 1833 [1837].

———. *Plan of Cambridge from Survey Taken in 1830*. Boston, 1830.

Hayward, James. *Plan showing streets, Cambridge, 1837*. Manuscript, Cambridge Engineering Department.

Hopkins, G. M. *Atlas of the City of Cambridge, Massachusetts*. Philadelphia, 1873. 2nd ed., 1886.

———. *Atlas of Somerville, Massachusetts*. Philadelphia, 1874. 2nd ed., 1883.

Mason, W. W., and Barbour, W. S. *Plan of Cambridge Horse Rail Road*. Cambridge, 1862. Manuscript by J. G. Chase [c. 1863], Cambridge Engineering Department.

McIntyre, H. F. "Map of the City of Boston and Immediate Neighborhood." Boston, 1852.

"A New Survey of the Harbour of Boston in New England." *The English Pilot*, fourth part. London, 1707.

A Panoramic View from Bunker Hill Monument. Engraved by James Smillie. Boston, 1848.

Sanborn, David A. *Insurance Maps of Charlestown with parts of Roxbury and Cambridge*. 1868.

Sanborn Map Co. *Insurance Maps of Cambridge, Massachusetts*, vol. 1. New York, 1935. Revised to 1987.

Sanborn-Perris Map Co. *Insurance Maps of Cambridge, Massachusetts*, vol. 1. New York, 1900. Revised to 1929.

Tufts, Peter, Jr. "Plan of Cambridgeport Parish." Cambridge, 1819.

———. "Plan of Charlestown Peninsula in the State of Massachusetts." Boston, 1818.

———. "Plan of Lechmere Point in Cambridge as Staked into Streets." 1811.

———. "Plan of Lechmere Point in Cambridge as Staked into Streets." 1811. Surveyed into lots by S. P. Fuller, 1822.

Wadsworth, Alexander. "Cambridge Wharf Company." May 27, 1847.

Walling, H. F. *Map of the City of Cambridge*. Boston, 1854.

Winthrop, John. *Massachusetts in N. England [c. 1633 with revisions c. 1637]*. Manuscript, Sloane Collection, British Museum.

Government Documents

Baldwin, Thomas W. *Vital Records of Cambridge, Massachusetts, to the Year 1850*. Vols. 1 and 2. Boston, 1914–15.

Cambridge. Assessors. Assessment records, 1794–present.

Cambridge Building Department. Building permits. 1886–present.

———. City Engineer. *List of Streets and Ways in the City of Cambridge, Massachusetts*. Cambridge, 1963.

———. Community Development Department. *East Cambridge Riverfront Plan*. Cambridge, 1978.

———. Historical Commission. Survey files.

———. *The Mayor's Address at the Organization of the City Government, and the Annual Report made to the City Council*. 1846–present.

———. Park Department. *Annual Reports*. 1893–1920.

———. *The Records of the Town of Cambridge (Formerly Newtowne), Massachusetts, 1630–1703*. Cambridge, 1901.

———. *The Register Book of the Lands and Houses in "New Towne" and in the Town of Cambridge, with the Records of the Proprietors of the Common Lands*. Cambridge, 1896.

———. *Report of a Committee of the Town, Relating to the West Boston and Canal Bridges*. Read at the meeting in Cambridgeport, November 13, 1843.

———. School Committee. *Annual Reports*. 1834–1903.

Massachusetts. *Annual Reports of the General Superintendent of Prisons, Relating to Prison Labor*. Boston, Third Annual, 1890; Twelfth Annual, 1899; Fourteenth Annual, 1901.

———. *Annual Reports of the Massachusetts Commissioners of Prisons*. Boston, 1872–99.

———. *Annual Reports of the Railroad Commissioners*, Massachusetts Senate Documents. 1836–85.

———. Ball, Phineas. *Report of the Joint Commission, Consisting of the Board of Harbor Commissioners and State Board of Health*. Boston, 1872.

———. Board of Harbor Commissioners. *Reports*. 1866–78.

———. Board of Harbor and Land Commissioners. *Reports*. 1879–1916.

———. Commission on Waterways & Public Lands. *Reports*. 1916–20.

———. Curtis, George. *Report of the Joint Special Committee on the Conditions of the House of Correction at Cambridge*. Boston, 1842.

———. Lincoln, John W., and Louis Dwight. *Report on Gaols and Houses of Correction in the Commonwealth of Massachusetts, Made by a Committee Appointed by the House of Representatives*. Boston, 1834.

———. *Report of the Committee on Charles River Dam*. Boston, 1903.

———. *Report of Hearing Before the Commission on Apportionment Between Boston and Cambridge of the Expense of Maintaining the West Boston and Canal Bridges*. 1870.

———. Secretary of the Commonwealth. *Abstracts of Sheriff's Returns Concerning Jails and Houses of Correction*. Boston. 1835, 1837, 1848, 1849, 1850.

———. *Testimony taken before the Committee on Prisons, in the investigation of alleged abuses at the jail and house of correction at East Cambridge*. Boston, 1860.

Metropolitan District Commission. *Reports*. Boston, 1920–49.

Middlesex County. Commissioners. *Report of the Condition of the Cambridge Prison and House of Correction*. Cambridge, January–July 1836 and July–December 1836.

———. Commissioners. *Report of the Master of the House of Correction and Keeper of the Jail in Middlesex County for the Year Ending December 31, 1885*. East Cambridge, 1886.

———. Commissioners. *Specifications [for enlarging the Middlesex County Superior Courthouse]*. Cambridge, 1848.

———. Court of Sessions Records, 1814–.

———. Registry of Deeds. Land Records.

———. Registry of Probate. Probate Records.

———. *Rules and Orders for the Management of the House of Correction at Cambridge, and the Government of Persons Confined Therein*. Concord, Mass., 1842?

Secretary of the Treasury. *Documents Relative to the Manufactures*

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in the U.S., Collected and Transmitted to the House of Representatives, in Compliance with a Resolution of January 19, 1832, I: 322–25. Washington, D.C., 1833.

Manuscripts

Boston, Mass. Baker Library, Harvard Graduate School of Business Administration. *Canal Bridge Corporation Journal.* 1821–48.
———. Baker Library, Harvard Graduate School of Business Administration. *Lechmere Point Corporation Records*, 1809–1822.
———. Baker Library, Harvard Graduate School of Business Administration. Massachusetts volumes 49–52, R. G. Dun & Co. Collection.
———. Massachusetts Historical Society. Andrew Craigie letters.
———. Massachusetts Historical Society. Richard Lechmere to John Lowell, Jr., September 29, 1971.
Cambridge, Mass. Cambridge Historical Commission. "Petition for a School at Lechmere Point." December 30, 1811.
———. Cambridge Historical Society. *Records of the East Cambridge Temperance Society.*
———. Cambridge Public Library. Lucius Paige Collection.
———. Cambridge Public Library. East End Christian Union Collection.
———. Massachusetts Institute of Technology Library. Gaffield Collection.
———. Sacred Heart Parish. St. John's and Sacred Heart Parish records, 1842 to date.
———. Widener Library, Harvard University. H. F. Louis Vaupel. *Kurze Biographie Meinerselbst (Short Biography of Myself).*
Corning, New York. Corning Archives. Thomas Leighton letter, November 1, 1829.
Providence, R.I. John Carter Brown Library, Brown University. George Washington letter, November 27, 1775.
Worcester, Mass. American Antiquarian Society. Andrew Craigie papers, 1717–1834.

Printed Material

Abbatt, William, ed. *Memoirs of Major General William Heath.* New York, 1901.
Almy, Charles. "The History of the Third District Court of Eastern Middlesex." *Cambridge Historical Society Proceedings* 17 (1931): 16–27.
Barber, John Warner. Historical Collections . . . of Every Town in Massachusetts with *Geographical Descriptions.* Worcester, Mass., 1841.
Boston & Lowell Railroad. *Annual Reports*, 1832–86.
Boston & Maine Railroad. *Annual Reports*, 1887–30.
Boston Daily Advertiser. 1842.
Boston Evening Transcript. January 1, 1884.
———. Obituaries.
"Boston's Charles River Basin, an Engineering Landmark," *Journal of the Boston Society of Civil Engineer's Section, American Society of Civil Engineers* 67 (1981).
Boston Prison Discipline Society. *Annual Reports of the Board of Managers of the Prison Discipline Society.* Vols. 1–29. Boston, 1826–54.
Boudinot, Elias. *Journey to Boston in 1809.* Princeton, N.J., 1955.
Bowen, Abel. *Abel Bowen's Picture of Boston, or the Citizen's and Stranger's Guide.* Boston, 1829.
Bradford, Gamaliel. *Description and Historical Sketch of the Massachusetts State Prison.* Charlestown, 1816.
Brown, Abram English. *Beneath Old Roof Trees.* Boston, 1896.
Bunting, Bainbridge. *Houses of Boston's Back Bay.* Cambridge, 1967.
Cambridge Chronicle. 1846–present.
———. *Hundredth Anniversary Edition.* Cambridge, 1946.
———. *Semi-Centennial Souvenir.* Cambridge, 1896.
———. *Seventy-Fifth Anniversary.* Cambridge, 1921.
Cambridge Directories. Published annually with occasional exceptions, 1848–1972.
Cambridge Historical Commission. Survey of Architectural History in Cambridge. *Report One: East Cambridge.* Cambridge, 1965. *Report Two: Mid Cambridge,* by Antoinette Downing, Elisabeth MacDougall and Eleanor Pearson. Cambridge, 1967. *Report Three: Cambridgeport.* Cambridge, 1971. *Report Four: Old Cambridge,* by Bainbridge Bunting and Robert H. Nylander. Cambridge, 1973. *Report Five: Northwest Cambridge,* by Arthur J. Krim. Cambridge, 1977.
Cambridge Improvement Company. The Cambridge Improvement Company. Boston, 1874
Cambridge Tribune. 1878–1941.
———. *Fiftieth Anniversary Number.* Cambridge, 1928.
———. *The Harvard Bridge, Souvenir edition.* Cambridge, 1890.
Catalogue of the East Cambridge Female School, Instituted at Cambridge, Massachusetts, August, 1837. August 1839.
Clarke, Mary Stetson. *The Old Middlesex Canal.* Melrose, Mass. 1974.
Columbian Centinel. June 26 and November 2, 1816.
Daughters of the American Revolution, Hannah Winthrop Chapter. *An Historic Guide to Cambridge.* Cambridgeport, 1907.
Davies, Walter Gee, ed. *Cambridge, Fifty Years a City.* Cambridge, 1897.
Derby, E. Hasket, Charles S. Lincoln, and Henry W. Muzzey. *Arguments Before the Commission on Miller's River.* Boston, 1872.
Dincauze, Dena F. "Prehistoric Occupation of The Charles River Estuary." *Bulletin of the Archaeological Society of Connecticut* 138 (August 1973): 27–39.
Dix, Dorothea L. *Remarks on Prisons and Prison Discipline in the United States.* Boston, 1845.
Donallan, John Whiting. *History of the Second Baptist Church, Cambridge, Mass.* Lawrence, Mass., 1866.
East Cambridge Lyceum. *Constitution and By-Laws of the East Cambridge Lyceum.* Boston, 1837.
East Cambridge Union Temperance Society. *Report of a Committee of the East Cambridge Union Temperance Society.* East Cambridge, 1848.
Eliot, Samuel A. *A History of Cambridge, Massachusetts.* Cambridge, 1913.
Emmet, Alan. *Cambridge Massachusetts: The Changing Landscape.* Cambridge, 1978.
Fauster, Carl A. *Libby Glass Since 1818.* Toledo, 1979.
Forbes, J. D. *Israel Thorndike, Federalist Financier.* New York, 1953.
Frost, Edward. *A Preliminary Discussion of the Miller's River Nuisance and Its Remedy.* Boston, 1872.
Frothingham, Richard, Jr. *History of Charlestown.* Boston, 1845
———. *History of the Siege of Boston.* Boston, 1849.
Garrett, Wendell D. "The Topographical Development of Cambridge, 1793–1896." *Cambridge Historical Society Proceedings* 39 (1964): 108–24.
Gilman, Arthur, ed. *The Cambridge of Eighteen Hundred and Ninety-Six.* Cambridge, 1896.
Green, Samuel Swett. "The Craigie House, Cambridge." *Proceedings of the American Antiquarian Society* 13 (1900): 312–52.
Hamlin, Talbot. *Greek Revival Architecture in America.* New York, 1944.
Handlin, Oscar. *Boston's Immigrants,* rev. ed. Cambridge, 1959.
Hastings, Lewis M. "An Historical Account of Some Bridges over the Charles River." *Cambridge Historical Society Proceedings* 7 (1913): 51–63.
———. *The Abolition of Railroad Crossings at Grade.* Cambridge, 1901.
Hayes-Cavanaugh, Doris. "Early Glass Making in East Cambridge." *Cambridge Historical Society Proceedings* 19 (1927): 32–45.
Holmes, Abiel. *History of Cambridge.* Boston, 1801.
———. *Memoir of Cambridgeport at the Settlement of Rev. Thomas B. Gannett.* Cambridge, January 19, 1814.
———. *The Annals of America,* vol. II. Cambridge, 1829.
Holmes, John. "Andrew Craigie." *Publications of the Colonial Society of Massachusetts* 7 (1902): 403–7.
Horsford, E. N. *Report on an Investigation of the Sources of the Offensive Odors Which are Ascribed to the Establishment of J. P. Squire & Co. of East Cambridge.* Cambridge, 1873.
Howe, Samuel G. "Report made to the Legislature of Massachusetts upon Idiocy." Boston, 1848.
Hulbert, Archer B. "Andrew Craigie and the Scioto Associates." *American Antiquarian Society Proceedings* 23 (1913): 222–36.
Hurd, D. Hamilton, ed. "Cambridge." *History of Middlesex County,* vol. I, 1–238. Philadelphia, 1890.
Jarvis, Edward. *Insanity and Idiocy in Massachusetts: Report of the Commission on Lunacy.* 1855; reprinted in Cambridge, 1971.
Kebler, Lyman F. "Andrew Craigie: The First Apothecary General of the United States." *Journal of the American Pharmaceutical Association* 17 (1928): 63–74, 167–78.
King, Moses. *King's Handbook of Boston.* Cambridge, 1879.
Kutler, Stanley J. *Privilege and Creative Destruction: The Charles River Bridge Case.* Philadelphia, 1971.

Downloaded from http://direct.mit.edu/books/book-pdf/2093403/book_9780262368001.pdf by guest on 06 August 2023

Lechmere-Point Library Association. *By-Laws of the Lechmere-Point Library Association.* Cambridge, 1822.
Lewis, O. F. *The Development of American Prisons and Prison Customs, 1776–1845.* Albany, 1922.
Little, Nina Fletcher. *Early Years of the McLean Hospital.* Boston, 1972.
Livermore, Issac. *An Account of Some of the Bridges over the Charles River.* Cambridge, 1900.
Livermore, Shaw. *Early American Land Companies: Their Influence on Corporate Development.* New York, 1939.
Lord, Robert H., John E. Sexton, and Edward T. Harrington. *History of the Archdiocese of Boston,* vol. 2. New York, 1944.
Marshall, Helen E. "Dorothea Dix." *Notable American Women 1607–1950: A Biographical Dictionary,* vol. I, Edward James, ed. Cambridge, 1971.
———. *Dorothea Dix: Forgotten Samaritan.* Chapel Hill, N.C., 1937.
Martin, Stephanie Lang. *A Guide to the Records of Sacred Heart Parish, East Cambridge.* Masters thesis, University of Massachusetts, Boston, 1980.
Maycock, Susan E. "Glassworkers, Housing, and Neighborhood Development in East Cambridge in the 19th Century." Paper read at the Society of Industrial Archeology Annual Meeting, June 1984.
McKearin, Helen and George S. *Two Hundred Years of American Blown Glass.* New York, 1950.
McMenimen, George A. *A Half Century of the St. John's Literary Institute, 1854–1904.* East Cambridge, 1904.
Meigs, Joe V. "The Meigs Elevated Railroad." Scientific American. 55 (1886): 15–21.
———. *The Meigs Railway.* Boston, 1887.
———. *True Rapid Transit.* Lowell, Mass., 1894.
Morison, Samuel Eliot. *Harrison Gray Otis.* Boston, 1969.
Murray, Albert. *The Story of Kendall Square: A Bit of History Concerning the New Location of Murray and Emery Co.* Cambridge, 1916.
Muzzey, Henry W. *Petition of the Mayor of Cambridge for Leave to Fill Up the Basin's of Miller's River, and Construct a Sewer Therein.* Boston, 1872.
———. *Closing Argument in Defence of the Slaughtering and Packing Establishment of Messrs. John P. Squire & Co.* Boston, 1872.
Nelb, Tawny Ryan. "Josiah Vincent Meigs and the Meigs Elevated Railway." Master's thesis, Southern Connecticut State College, 1983.
"New England Glass Company's Works." *Ballou's Pictorial Drawing-Room Companion.* January 20, 1855.
"New England Glassworks." *Gleason's Pictorial.* December 6, 1851.
"Observations concerning the Canal Bridge." *Boston Athenaeum Tracts,* pp. 399–404.
O'Malley, Thomas F. "Critical and Explanatory Notes" [on S. S. Simpson, Two Hundred Years Ago: or a Brief History of Cambridgeport and East Cambridge]. *Cambridge Historical Society Proceedings* 16 (1931).
Paige, Lucius R. *History of Cambridge, Massachusetts, 1630–1877, with a Genealogical Register.* Boston, 1877. *Supplement and Index* by Mary Isabella Gozzaldi. Cambridge, 1930.
Pairpont, Alfred. *Uncle Sam and His Country.* London, 1857.
Palmer, Arlene. "The Glassmakers of Early America." Paper read at Winterthur Conference, November 1979, at Winterthur Museum, Winterthur, Del. November 1979.
Palmer, Foster M. "Horse Car, Trolley and Subway." *Cambridge Historical Society Proceedings.* 39 (1962) 78–107.
Pettigrove, Frederick G. *An Account of the Prisons of Massachusetts.* Boston, 1904.
Place, Charles A. *Charles Bulfinch, Architect and Citizen.* Boston, 1925.
Pratt, Frederick Haven. "The Craigies." *Cambridge Historical Society Proceedings* 27 (1942).
Report made by the Boston & Lowell Railroad Corporation of the Location of the Route of the Railroad. Boston, November 1832.
Rettig, Robert Bell. *Guide to Cambridge Architecture: Ten Walking Tours.* Cambridge, 1969.
Roberts, Christopher. *The Middlesex Canal.* Cambridge, 1938.
Rothman, David J. *The Discovery of the Asylum: Social Order and Disorder in the New Republic.* Boston, 1971.
St. John's Literary Institute. *Constitution, By Laws, and Rules of Order of the St. John's Literary Institute.* East Cambridge, 1884.
Scoville, Warren C. *Revolution in Glassmaking.* Cambridge, 1948.
Seaburg, Carl, and Stanley Paterson. *Merchant Prince of Boston: Thomas Handasyd Perkins.* Cambridge, 1971.
Sheldon, Eugene L., and Ordway Tead. "East Cambridge." In *The Zone of Emergence,* 2nd ed., by Robert A. Woods and Albert J. Kennedy. Cambridge, 1969.
Shurtleff, Nathaniel B., ed. *Records of the Governor and Company of the Massachusetts Bay in New England, vol. II.* Boston, 1853.
Shurtleff, Nathaniel B. *A Topographical and Historical Description of Boston.* Boston, 1871.
Simonds, Thomas C. *History of South Boston.* Boston, 1857.
Simpson, Sophia Shuttleworth. *Two Hundred Years Ago; or, A Brief History of Cambridgeport and East Cambridge.* Boston, 1859.
Souvenir in Honor of the Triple Anniversary of the Reverend John O'Brien. East Cambridge, 1908.
Stone, E. D. *Recent and Future Architecture.* New York, 1967.
Stone, Orra L. *History of Massachusetts Industries,* vol. I. Boston, 1930.
Sutton, S. B. *Cambridge Reconsidered.* Cambridge, 1976.
Sweetser, M. F. *King's Handbook of Boston Harbor.* Cambridge, 1882, 1883.
Union Temperance Society. *Report, Embracing a History of the Society and a Statement of the Condition of the Cause in East Cambridge.* January 8, 1843.
Viaux, F. H. *The Reclamation of the Riparian Lands of Cambridge and the First Street District.* Cambridge, 1891.
Warner, Sam Bass. *Streetcar Suburbs.* Cambridge, 1962.
Waterson, Robert Cassie. *The Condition of the Insane in Massachusetts.* Boston, 1843.
Watkins, Lura Woodside. *Cambridge Glass, 1818–1888: the Story of the New England Glass Company.* New York, 1930.
———. *American Glass and Glassmaking.* Southampton, N.Y., 1960.
Whitehill, Walter Muir. *Boston: A Topographical History.* Cambridge, 1968.
Wilson, Kenneth M. *New England Glass and Glassmaking.* New York, 1972.
Wood, John W. "Some Aspects of the East Cambridge Story." *Cambridge Historical Society Proceedings.* 36 (1957): 93–105.
Wright, George C. "The Schools of Cambridge, 1800–1870." *Cambridge Historical Society Proceedings.* 13 (1925): 89–113.
Young, Ammi B. "An Architectural Description of the New Court House in the City of Cambridge, Mass." Charlestown, 1849.

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Abbreviations

BA	Boston Athenaeum
BD	Boston Directory
BERY	Boston Elevated Railway
BPL	Boston Public Library
CCDD	Cambridge Community Development Department
CDPW	Cambridge Department of Public Works
CD	Cambridge Directory
CED	Cambridge Engineering Department
CHC	Cambridge Historical Commission
CHS	Cambridge Historical Society
CPB	Cambridge Planning Board
CPL	Cambridge Public Library
HUL	Harvard University Libraries
HABS	Historic American Buildings Survey
MHS	Massachusetts Historical Society
MIT	Massachusetts Institute of Technology
MDC	Metropolitan District Commission
MC	Middlesex County
SPNEA	Society for the Preservation of New England Antiquities
SHS	Somerville Historical Society

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14. "Boston from Willis Creek," *Atlantic Neptune*, vol. 2, pt. 2 (London, 1775). BA
15. "Boston with its environs," in William Gordon, *History of the Rise, Progress, and Conclusion of the North American Revolution* (London, 1788). BA
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